



*Bringing enzymes to chemistry™*

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## Enzyme Product Catalog (August 2009)

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## I. General Information on Enzyme Products

Syncore offers a wide range of novel or proprietary enzymes including ene reductases, ketone reductases (alcohol dehydrogenases), nitrile hydratases, nitrilases, oxynitrilases (hydroxynitrile lyases), transaminases, nitro reductases, amidases, alcohol oxidases, amino acid dehydrogenases, epoxide hydrolases, P450 monooxygenases, most classic hydrolytic enzymes (lipases, proteases, amidases, esterases) and their immobilized forms. The typical timeline for enzyme production is

- ❖ Kg scale: 1-2 months
- ❖ 10kg scale: 2-3 months
- ❖ 100kg scale: 3-4 months

**For additional information on individual enzymes, their activity, purity and other specifications, bulk pricing, and delivery time, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).**



## II. Contract R&D Services for Enzyme Development & Chemical Synthesis

Syncore provides a wide range of cost-effective and high quality customer services.. **Our business model is fee-for-service** and we aspire to be your reliable partner in lowering the cost of enzyme development and their synthetic applications. As a research-driven and customer-focused company, our experienced team has streamlined the gene-to-protein-to-chemistry process to provide a wide range of services for industrial applications:

- ❖ Genome mining and enzyme library development
- ❖ Enzyme cloning, expression, and fermentation
- ❖ Enzyme production and purification (liter to >1,000L)
- ❖ Protein engineering and directed evolution
- ❖ High throughput screening of biotransformations
- ❖ Synthesis of chiral building blocks and intermediates
- ❖ Design and development of biocatalytic chemical processes

We have the **state-of-the-art equipment in both biology and chemistry** including:

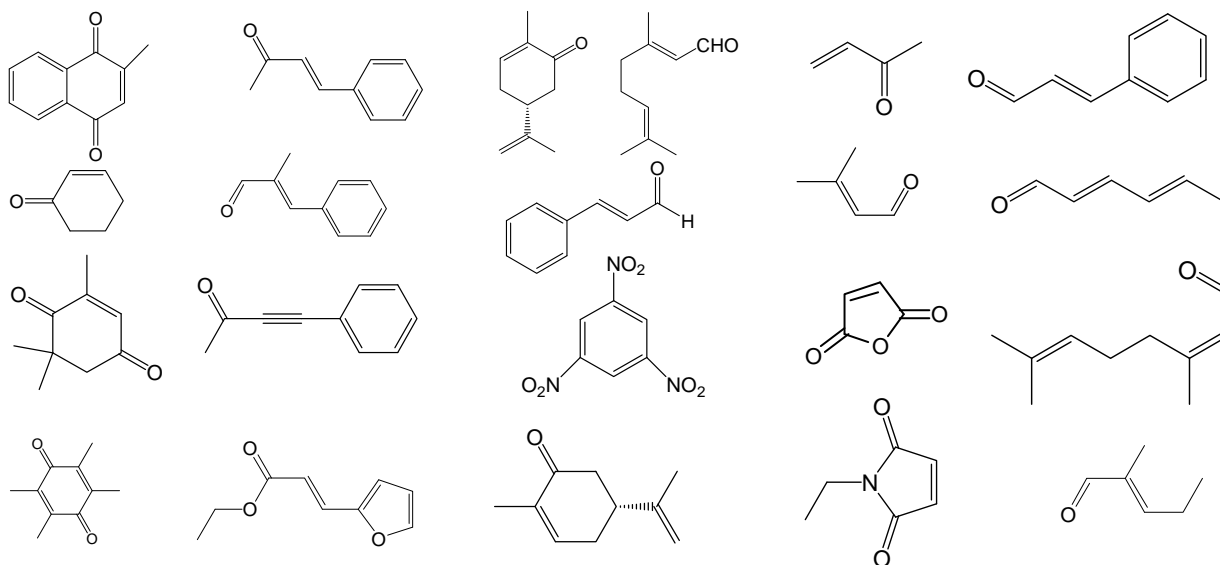
- ❖ 400MHz NMR
- ❖ Polymerase Chain Reactors (PCRs)
- ❖ HT Screening and Protein Engineering Hardware and Software
- ❖ 30L-500L Fermentors
- ❖ Homogenizer
- ❖ Lyophilizer
- ❖ LC-MS
- ❖ HPLC (chiral)
- ❖ Microwave Synthesizer
- ❖ Kilo Chemistry and Biology Labs

**For additional information on contract R&D services, FTE rate and delivery time, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).**

### III. Enzyme Catalog

#### Ene Reductases

This library of ene reductases (ES-ERED) is able to catalyze regio- and stereoselective double bond reduction of  $\alpha$ ,  $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, and amides, such as



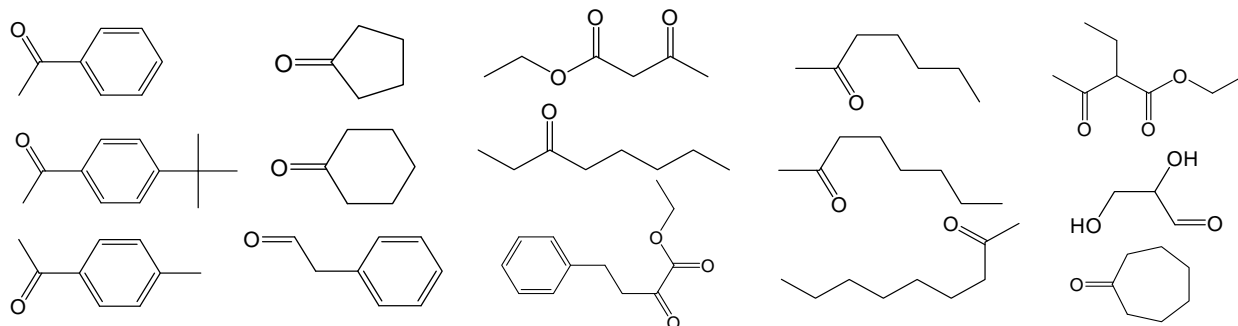
For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

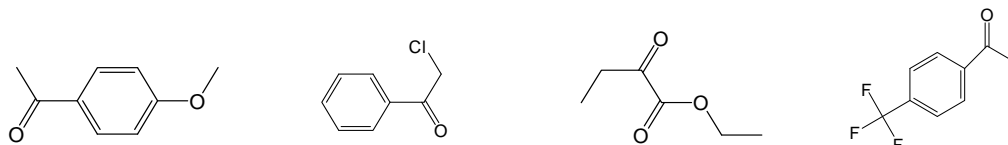
Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-ERED-101</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-102</b>	ene reductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-ERED-103</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-104</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-105</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-106</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-107</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-108</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-109</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones,	50 mg \$315; 1 g

		nitriles, nitros, amides	\$1,050
<b>ES-ERED-110</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-111</b>	ene reductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-ERED-112</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-113</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-114</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-115</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-116</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-117</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-118</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-119</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-120</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-121</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-122</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-123</b>	ene reductase	$\alpha$ , $\beta$ -unsaturated aldehydes, ketones, nitriles, nitros, amides	50 mg \$315; 1 g \$1,050
<b>ES-ERED-2300</b>	ene reductase	<b>a set of twenty-three ene reductases, 50 mg each</b>	\$3,360

### Ketoreductases

The library of ketone reductases (ES-KRED) is able to catalyze regio- and stereoselective reduction of a wide range of aldehydes,  $\beta$ -ketoesters,  $\alpha$ -ketoesters and ketones, such as





For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-KRED-101</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-102</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-103</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-104</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-105</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-106</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-107</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-108</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-109</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-110</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-111</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-112</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-113</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-114</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-115</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-116</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-117</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-118</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050

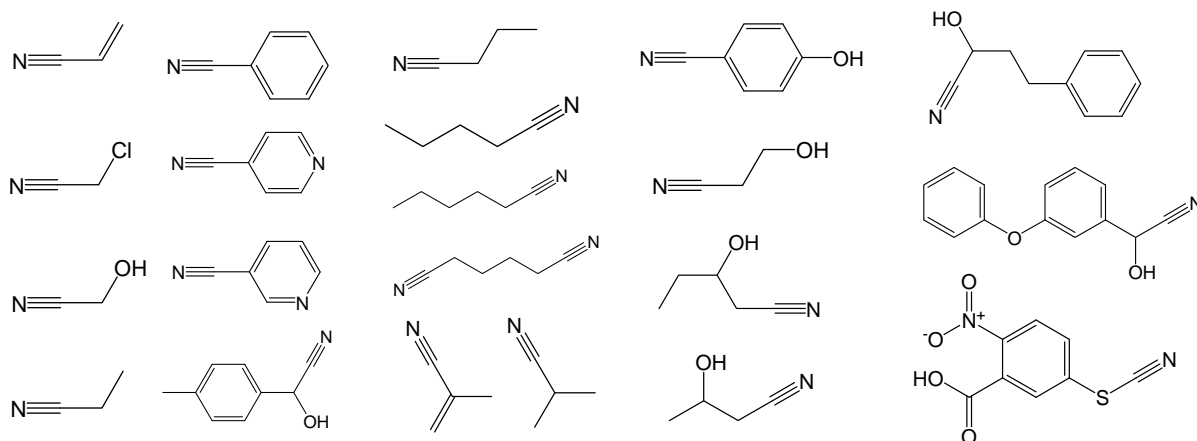
<b>ES-KRED-119</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-120</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-121</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-122</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-123</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-124</b>	ketoreductase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-KRED-125</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-126</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-127</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-128</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-129</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-KRED-130</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-131</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-132</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-133</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-134</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-135</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-136</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-137</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-138</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-139</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-140</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-KRED-141</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050



<b>ES-KRED-165</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-KRED-166</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-KRED-167</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-168</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-KRED-169</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-KRED-170</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-171</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-172</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-173</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-174</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-175</b>	ketoreductase	aldehydes, $\beta$ -ketoesters, $\alpha$ -ketoesters and ketones	50 mg \$315; 1 g \$1,050
<b>ES-KRED-7500</b>	ketoreductase	<b>a set of seventy-five ketoreductases, 50 mg each</b>	\$11,000

### Nitrile Hydratases

The library of nitrile hydratases (ES-NHT) is able to catalyze the synthesis of chiral amides through regio- and stereoselective hydrolysis of a variety of aliphatic and aromatic nitriles, such as



**For information on individual enzyme's activity, purity and other specifications, as well as bulk**

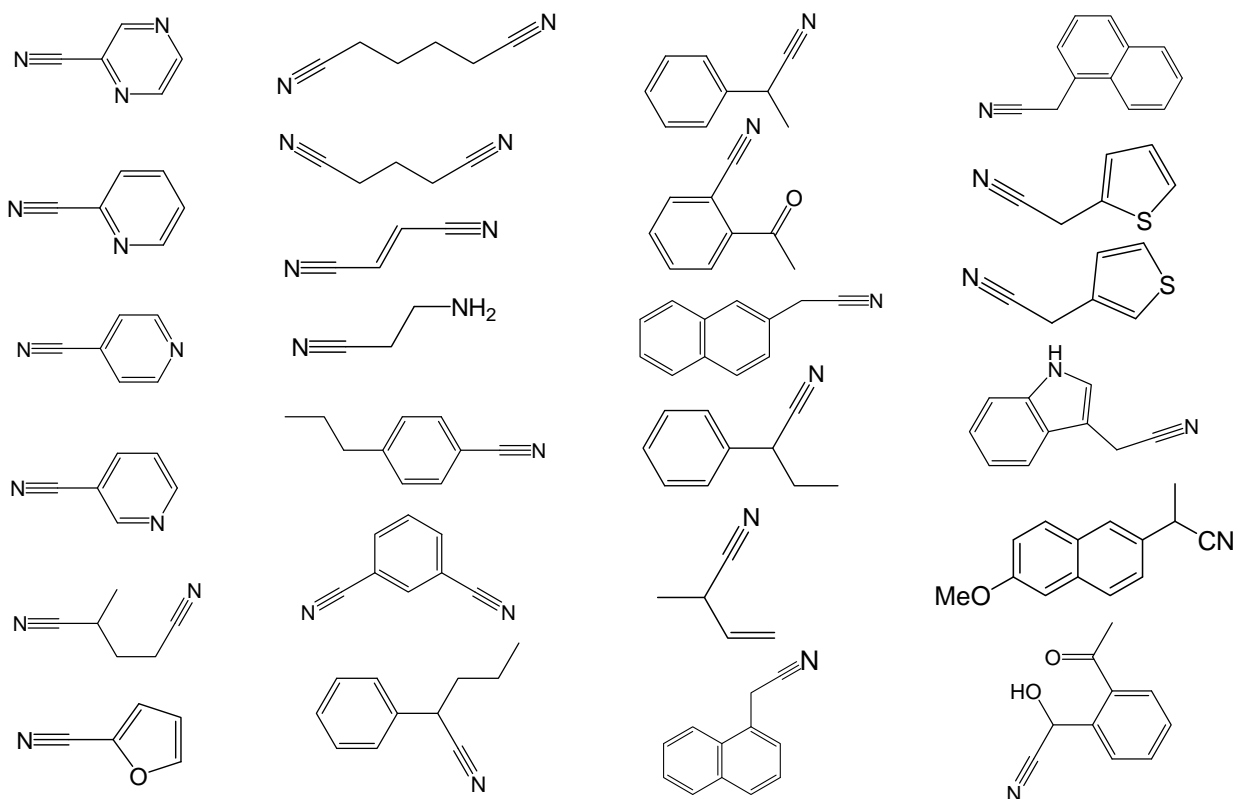
pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-NHT-101</b>	nitrile hydratase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NHT-102</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-103</b>	nitrile hydratase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NHT-104</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-105</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-106</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-107</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-108</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-109</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-110</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-111</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-112</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-113</b>	nitrile hydratase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-114</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-115</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-116</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-117</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-118</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-119</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-120</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-121</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050

<b>ES-NHT-122</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-123</b>	nitrile hydratase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NHT-124</b>	nitrile hydratase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NHT-2400</b>	nitrile hydratase	<b>a set of twenty-four nitrile hydratases, 50 mg each</b>	\$3,500

### Nitrilases

The nitrilase (ES-NIT) library is able to catalyze the synthesis of chiral carboxylic acids through regio- and stereoselective hydrolysis of a wide range of aliphatic and aromatic nitriles, such as



For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

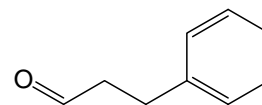
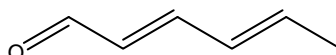
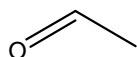
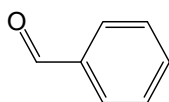
Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-NIT-101</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050

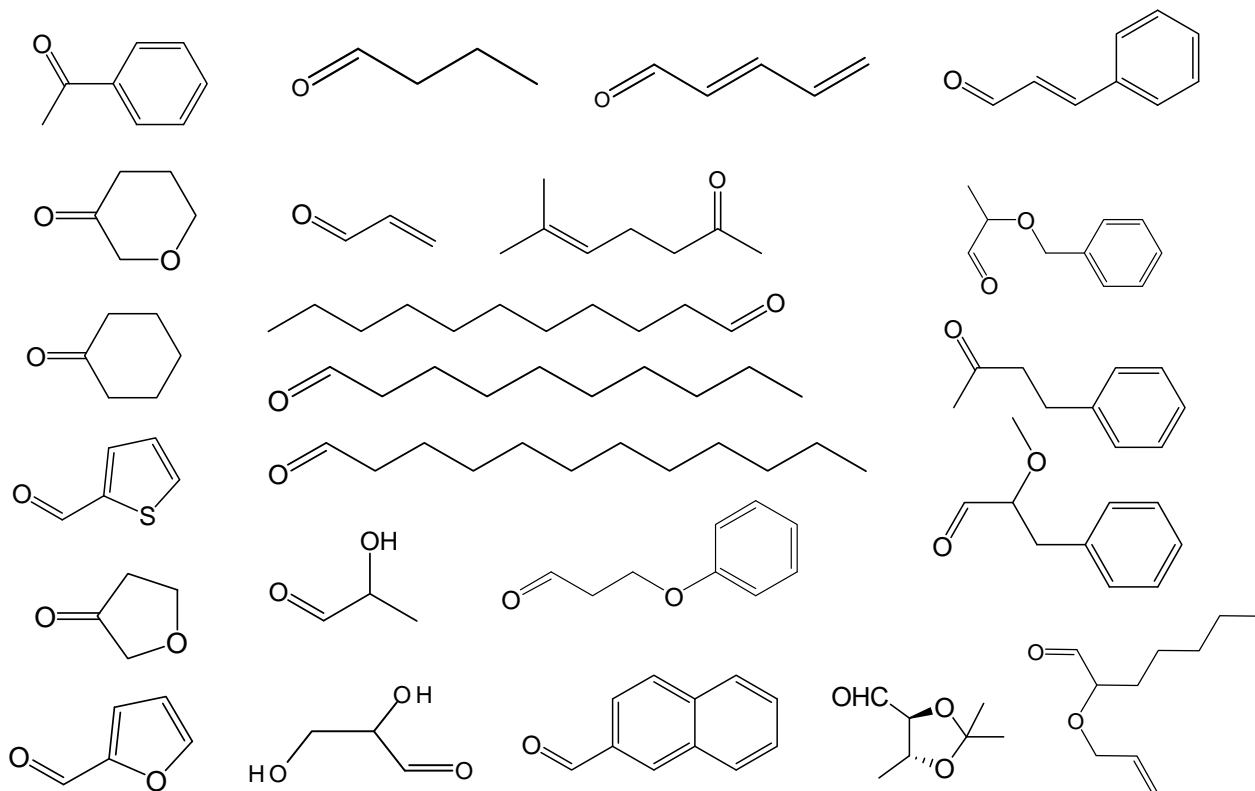
<b>ES-NIT-102</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-103</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-104</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-105</b>	nitrilase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-106</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-107</b>	nitrilase	aliphatic and aromatic nitriles, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-108</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-109</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-110</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-111</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-112</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-113</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-114</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-115</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-116</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-117</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-118</b>	nitrilase	broad substrate spectrum, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
<b>ES-NIT-119</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-120</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-121</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-122</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-123</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-124</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050

<b>ES-NIT-125</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-126</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-127</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-128</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-129</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-130</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-131</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-132</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-133</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-134</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-135</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-136</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-137</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-138</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-139</b>	nitrilase	aliphatic and aromatic nitriles	50 mg \$315; 1 g \$1,050
<b>ES-NIT-140</b>	nitrilase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
<b>ES-NIT-4000</b>	nitrilase	<b>a set of forty nitrilases, 50 mg each</b>	\$5,900

### Oxynitrilases

The library of oxynitrilases or hydroxynitrile lyases (ES-HNL) is able to catalyze regio- and stereoselective synthesis of (*R*)-cyanohydrins or (*S*)-cyanohydrins from a variety of aromatic, aliphatic and heterocyclic aldehydes or even ketones, such as





For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
ES-HNL-101	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
ES-HNL-102	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
ES-HNL-103	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
ES-HNL-104	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
ES-HNL-105	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
ES-HNL-106	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones, <b>thermostable</b>	50 mg \$315; 1 g \$1,050
ES-HNL-107	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
ES-HNL-108	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
ES-HNL-109	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050

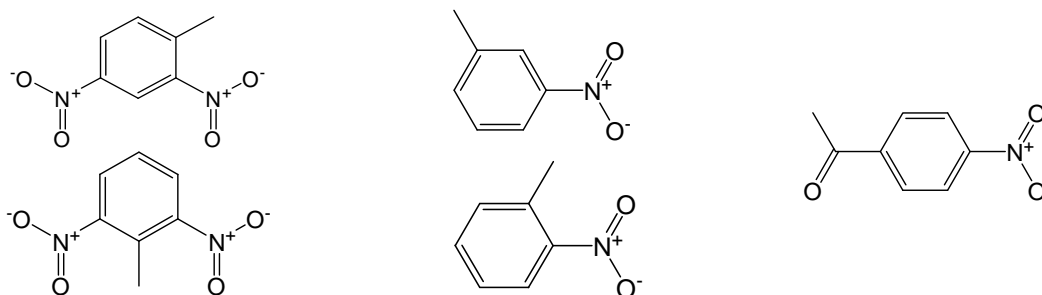
<b>ES-HNL-110</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-111</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-112</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-113</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-114</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-115</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-116</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-117</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-118</b>	(S)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	50 mg \$315; 1 g \$1,050
<b>ES-HNL-1800</b>	(S)-oxynitrilase	<b>a set of eighteen (S)-oxynitrilases, 50 mg each</b>	\$2,800
<b>ES-HNL-119</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes, ketones	5 KU \$315; 50 KU \$1,050
<b>ES-HNL-120</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	5 KU \$315; 50 KU \$1,050
<b>ES-HNL-121</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	5 KU \$315; 50 KU \$1,050
<b>ES-HNL-122</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-123</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-124</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-125</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-126</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-127</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-128</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-129</b>	(R)-oxynitrilase	aromatic, aliphatic and heterocyclic aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-HNL-1100</b>	(R)-oxynitrilase	<b>a set of eleven (R)-oxynitrilases, 5 KU or 50 mg each</b>	\$1,750



<b>ES-ATA-108</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-109</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-110</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-111</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-112</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-113</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-114</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-115</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-116</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-117</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-118</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-119</b>	$\omega$ -transaminase	ketones, ketoacids and aldehydes	50 mg \$315; 1 g \$1,050
<b>ES-ATA-1900</b>	$\omega$ -transaminase	<b>a set of nineteen <math>\omega</math>-transaminases, 50 mg each</b>	\$3,000

### Nitro Reductases

The library of nitro reductases (ES-NTR) is able to catalyze the synthesis of amines from corresponding nitro compounds, such as



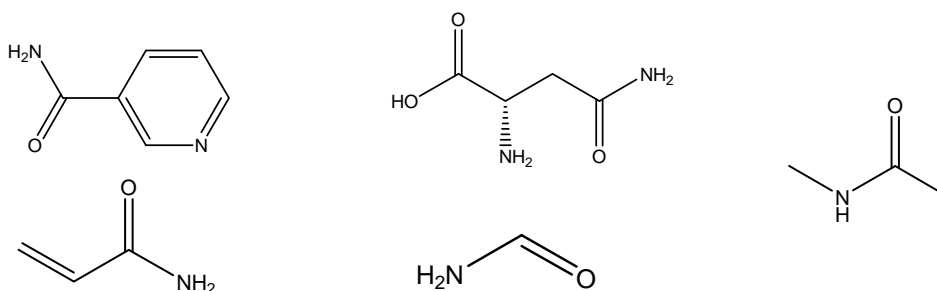
For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
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<b>ES-NTR-101</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-102</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-103</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-104</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-105</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-106</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-107</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-108</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-109</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-110</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-111</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-112</b>	nitro reductase	aromatic nitro compounds	50 mg \$315; 1 g \$1,050
<b>ES-NTR-1200</b>	nitro reductase	<b>a set of twelve nitro reductases, 50 mg each</b>	\$1,900

### Amidases

The library of amidases (ES-AMD) is able to catalyze regio- and stereoselective **synthesis of chiral carboxylic acids and their derivatives from a variety of aliphatic and aromatic amides**. For example,



For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-AMD-101</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050

<b>ES-AMD-102</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-103</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-104</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-105</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-106</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-107</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-108</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-109</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-110</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-111</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-112</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-113</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-114</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-115</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-116</b>	amidase	aliphatic and aromatic amides	50 mg \$315; 1 g \$1,050
<b>ES-AMD-1600</b>	amidase	<b>a set of sixteen amidases, 50 mg each</b>	\$2,500

### Glucose Dehydrogenases

The library of glucose dehydrogenases is used for recycling NADPH with glucose as the reducing agent. **For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).**

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-GDH-101</b>	glucose dehydrogenase	glucose	50 mg \$315; 1 g \$1,050
<b>ES-GDH-102</b>	glucose dehydrogenase	glucose	50 mg \$315; 1 g \$1,050
<b>ES-GDH-103</b>	glucose dehydrogenase	glucose	50 mg \$315; 1 g \$1,050
<b>ES-GDH-104</b>	glucose	glucose	50 mg \$315; 1 g

	dehydrogenase		\$1,050
<b>ES-GDH-400</b>	glucose dehydrogenase	<b>a set of four glucose dehydrogenases, 50 mg each</b>	\$630

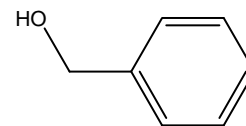
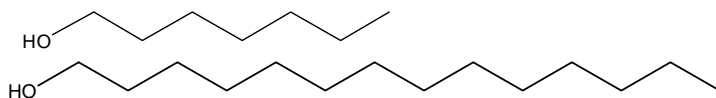
### Formate Dehydrogenases

The library of formate dehydrogenases is used for recycling NADH with ammonium formate or formic acid as the reducing agent. **For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing,** please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-FDH-101</b>	formate dehydrogenase	ammonium formate (formic acid)	50 mg \$315; 1 g \$1,050
<b>ES-FDH-102</b>	formate dehydrogenase	ammonium formate (formic acid)	50 mg \$315; 1 g \$1,050
<b>ES-FDH-200</b>	formate dehydrogenase	<b>a set of two formate dehydrogenases, 50 mg each</b>	\$420

### Alcohol Oxidase

The library of alcohol oxidases (EC-AOX) is able to catalyze oxidation of fatty alcohols or aryl-alcohols to form aldehydes or aldehydes. For example,

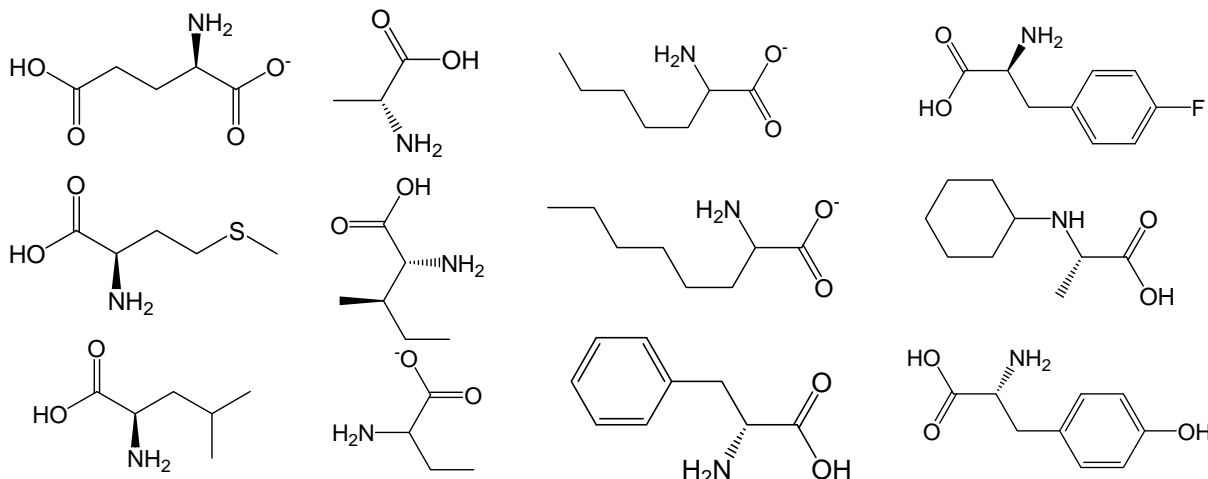


**For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing,** please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
<b>ES-AOX-101</b>	alcohol oxidase	fatty alcohol and aryl-alcohol	50 mg \$315; 1 g \$1,050
<b>ES-AOX -102</b>	alcohol oxidase	fatty alcohol and aryl-alcohol	50 mg \$315; 1 g \$1,050
<b>ES-AOX -103</b>	alcohol oxidase	fatty alcohol and aryl-alcohol	50 mg \$315; 1 g \$1,050
<b>ES-AOX -104</b>	alcohol oxidase	fatty alcohol and aryl-alcohol	50 mg \$315; 1 g \$1,050
<b>ES-AOX-105</b>	alcohol oxidase	fatty alcohol and aryl-alcohol	50 mg \$315; 1 g \$1,050
<b>ES-AOX-500</b>	alcohol oxidase	<b>a set of five alcohol oxidases, 50 mg each</b>	\$800

### D-Amino Acid Dehydrogenase

The library of D-amino acid dehydrogenases (D-AADH) is able to catalyze regio- and stereoselective synthesis of D-amino acids from corresponding 2-keto acids with ammonia, such as

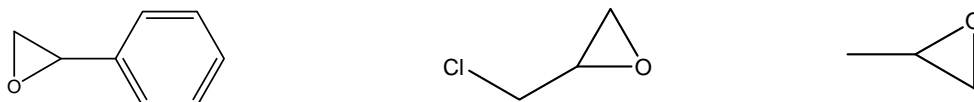


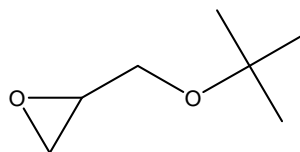
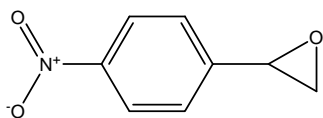
For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
ES- D-AADH - 101	D-amino acid dehydrogenase	2-keto acids	50 mg \$315; 1 g \$1,050
ES- D-AADH - 102	D-amino acid dehydrogenase	2-keto acids	50 mg \$315; 1 g \$1,050
ES- D-AADH - 103	D-amino acid dehydrogenase	2-keto acids	50 mg \$315; 1 g \$1,050
ES- D-AADH - 104	D-amino acid dehydrogenase	2-keto acids	50 mg \$315; 1 g \$1,050
ES- D-AADH - 105	D-amino acid dehydrogenase	2-keto acids	50 mg \$315; 1 g \$1,050
ES- D-AADH - 106	D-amino acid dehydrogenase	2-keto acids	50 mg \$315; 1 g \$1,050
ES- D-AADH - 107	D-amino acid dehydrogenase	2-keto acids	50 mg \$315; 1 g \$1,050
ES- D-AADH - 700	D-amino acid dehydrogenase	<b>a set of seven D-amino acid dehydrogenase, 50 mg each</b>	\$1,100

### Epoxide Hydrolases

The library of epoxide hydrolases (ES-EH) is able to catalyze the synthesis of chiral alcohols through stereoselective hydrolysis of aliphatic and aromatic epoxides, such as



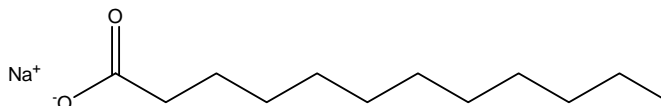
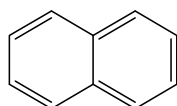
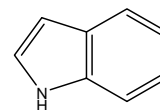
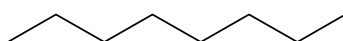
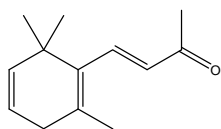


For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
ES-EH-101	epoxide hydrolase	aliphatic and aromatic epoxide	50 mg \$315; 1 g \$1,050
ES-EH-102	epoxide hydrolase	aliphatic and aromatic epoxide	50 mg \$315; 1 g \$1,050
ES-EH-200	epoxide hydrolase	<b>a set of two epoxide hydrolases, 50 mg each</b>	\$420

### Cytochrome P450 Monooxygenase

The library of cytochrome P450 monooxygenases (ES-CYP) is able to hydroxylate unreactive carbons (C-H activation) or oxidize heteroatoms (N, S, etc.) in the presence of oxygen, such as



For information on individual enzyme's activity, purity and other specifications, as well as bulk pricing, please contact [services@syncorelabs.com](mailto:services@syncorelabs.com).

Catalog No.	Product Name	Substrate Spectrum	Prices (US Dollars)
ES-CYP-101	cytochrome P450 monooxygenase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
ES-CYP-102	cytochrome P450 monooxygenase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
ES-CYP-103	cytochrome P450 monooxygenase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
ES-CYP-104	cytochrome P450 monooxygenase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
ES-CYP-105	cytochrome P450 monooxygenase	broad substrate spectrum	50 mg \$315; 1 g \$1,050
ES-CYP-500	cytochrome P450 monooxygenase	<b>a set of five cytochrome P450 monooxygenases, 50 mg each</b>	\$800

<b>Glycosidases</b>			
<b>Catalog No.</b>	<b>Product Name</b>	<b>Sources/Substrates</b>	<b>Prices (US Dollars)</b>
<b>ES-CARH-301</b>	$\alpha$ -amylase	starch, 4000 U/g	250 g \$30
<b>ES-CARH-302</b>	$\beta$ -amylase	starch, 500 U/mg	25 g \$20
<b>ES-CARH-303</b>	cellulase	cellulose, 400 U/mg	10 g \$20
<b>ES-CARH-304</b>	xylanase	xylan, 60 KU/mg	5 g \$30
<b>ES-CARH-305</b>	$\beta$ -glucosidase	such as p-nitrophenyl $\beta$ -D-glucopyranoside, 600 U/g	50 mg \$105; 1 g \$525

<b>Hydrolases</b>			
<b>Catalog No.</b>	<b>Products</b>	<b>Sources</b>	<b>Prices (US Dollars)</b>
<b>ES-HLE-301</b>	lipase	Porcine pancreatic	5 g \$42
<b>ES-HLE-302</b>	protease	Bovine pancreatic	25 g \$84
<b>ES-HLE-303</b>	protease	Porcine gastric	5 g \$52
<b>ES-HLE-304</b>	protease	Papain	25 g \$84
<b>ES-HLE-305</b>	protease	<i>Ananas comosus</i>	5 g \$73
<b>ES-HLE-307</b>	protease	Acidic	250 g \$105
<b>ES-HLE-308</b>	protease	Neutral	250 g \$105
<b>ES-HLE-309</b>	amidase	Penicillin acylase I, immobilized	1 KU \$52
<b>ES-HLE-310</b>	amidase	Penicillin acylase II, immobilized	1 KU \$105
<b>ES-HLE-201</b>	lipase	Microbial	50 mg \$105; 1 g \$525
<b>ES-HLE-202</b>	lipase	Microbial	50 mg \$105; 1 g \$525
<b>ES-HLE-203</b>	lipase	Microbial	50 mg \$105; 1 g \$525
<b>ES-HLE-204</b>	lactonase	Microbial	50 mg \$105; 1 g \$525
<b>ES-PL-205</b>	esterase		1KU \$30
<b>CV-CALBY</b>	lipase	<i>Candida antarctica</i>	10 g \$120; 100 g \$400
<b>CV-CALAY</b>	lipase	<i>Candida antarctica</i>	1g \$160; 5 g \$400
<b>CV-CRL1</b>	lipase	<i>Candida rugosa</i>	1 g \$320
<b>CV-P6L</b>	protease	<i>Bacillus licheniformis</i>	50 ml \$120; 250 ml \$200
<b>CV-P8L</b>	protease	<i>Bacillus licheniformis</i>	
<b>CV-P7L</b>	protease	<i>Bacillus amyloliquefaciens</i>	50 ml \$120; 250 ml \$200
<b>CV-P13FL</b>	protease	<i>Aspergillus niger</i>	50 ml \$120; 250 ml \$200
<b>CV-P14L</b>	protease	Thermolysin ( <i>Geobacillus sp.</i> )	50 ml \$120; 250 ml

			\$200
<b>CV-P15L</b>	protease	<i>Trichoderma reesei</i>	50 ml \$120; 250 ml \$200
<b>CV-P30L</b>	protease	<i>Bacillus subtilis</i>	50 ml \$120; 250 ml \$200
<b>CV-P40L</b>	protease	<i>Bacillus subtilis</i>	50 ml \$120; 250 ml \$200
<b>CV-P40XL</b>	protease	<i>Bacillus subtilis</i>	50 ml \$120; 250 ml \$200
<b>CV-P50FP</b>	protease	<i>Aspergillus oryzae var.</i>	50 ml \$120; 250 ml \$200
<b>CV-P51FP</b>	protease	<i>Aspergillus oryzae var.</i>	50 ml \$120; 250 ml \$200
<b>CV-P89L</b>	protease	<i>Bacillus subtilis</i>	50 ml \$120; 250 ml \$200

### Immobilized Lipases

(Particle size = 150-300 µm, T1 = absorbed & dry, T2 = covalent & dry, T3 = covalent & wet)

Catalog No.	Product Name	Sources/Substrates	Prices (US Dollars)
<b>IMMCALA-T2-150</b>	lipase	<i>Candida antarctica A</i>	5g \$160; 100 g \$400
<b>IMMCALB-T1-1500</b>	lipase	<i>Candida antarctica B</i>	5g \$160; 100 g \$400
<b>IMMCALB-T2-150</b>	lipase	<i>Candida antarctica B</i>	5g \$160; 100 g \$400
<b>IMMCALBY-T1-1500</b>	lipase	<i>Candida antarctica B</i>	5g \$160; 100 g \$400
<b>IMMCALBY-T2-150</b>	lipase	<i>Candida antarctica B</i>	5g \$160; 100 g \$400
<b>IMMRML-T2-150</b>	lipase	<i>Rhizomucor miehei</i>	5g \$160; 100 g \$400
<b>IMMCRL-T2-150</b>	lipase	<i>Candida rugosa</i>	5g \$160; 100 g \$400
<b>IMMTLL-T1-1500</b>	lipase	<i>Thermomyces lanuginosa</i>	5g \$160; 100 g \$400
<b>IMMTLL-T2-150</b>	lipase	<i>Thermomyces lanuginosa</i>	5g \$160; 100 g \$400
<b>IMMCCL-T2-150</b>	lipase	<i>Candida cylindracea</i>	5g \$160; 100 g \$400
<b>IMMABC-T2-150</b>	lipase	<i>Pseudomonas cepacia</i>	5g \$160; 100 g \$400
<b>IMMAPF-T2-150</b>	lipase	<i>Pseudomonas fluorescens</i>	5g \$160; 100 g \$400
<b>IMMARO-T2-150</b>	lipase	<i>Rhizopus oryzae</i>	5g \$160; 100 g \$400
<b>IMMCALAY-T2-150</b>	lipase	<i>Candida antarctica A</i>	1g \$160
<b>IMMCRL1-T2-</b>	lipase	<i>Candida rugosa</i>	1g \$160

<b>150</b>			
<b>IMMAMJ-T2-150</b>	lipase	<i>Mucor javanicus</i>	5g \$160; 100 g \$400
<b>IMMANF-T2-150</b>	lipase	<i>Aspergillus niger</i>	1g \$160
<b>IMMANA-T2-150</b>	lipase	<i>Aspergillus niger</i>	1g \$160
<b>IMMRNA-T2-150</b>	lipase	<i>Rhizopus niveus</i>	1g \$160
<b>IMMASMQ-T2-150</b>	lipase	<i>Alcaligenes sp.</i>	1g \$160
<b>IMMASMP-T2-150</b>	lipase	<i>Alcaligenes sp.</i>	1g \$160
<b>IMMRES-T2-150</b>	lipase	Resinase HT	1g \$160
<b>IMMLIPX-T2-150</b>	lipase	Lipex 100L	1g \$160
<b>IMML51-T2-150</b>	lipase		1g \$160
<b>IMMCCMO-T2-150</b>	lipase	<i>Candida cylindracea sp.</i>	1g \$160
<b>IMMCCMM-T2-150</b>	lipase	<i>Candida cylindracea sp.</i>	1g \$160
<b>IMMAULI-T2-150</b>	lipase	<i>Bacillus subtilis</i>	5g \$160; 100 g \$400
<b>IMMCALA-T3-150</b>	lipase	<i>Candida antarctica A</i>	10g \$160; 200 g \$320
<b>IMMCALB-T3-150</b>	lipase	<i>Candida antarctica B</i>	10g \$160; 200 g \$320
<b>IMMCALBY-T3-150</b>	lipase	<i>Candida antarctica B</i>	10g \$160; 200 g \$320
<b>IMMRML-T3-150</b>	lipase	<i>Rhizomucor miehei</i>	10g \$160; 200 g \$320
<b>IMMCRL-T3-150</b>	lipase	<i>Candida rugosa</i>	10g \$160; 200 g \$320
<b>IMMTLL-T3-150</b>	lipase	<i>Thermomyces lanuginosa</i>	10g \$160; 200 g \$320
<b>IMMCCL-T3-150</b>	lipase	<i>Candida cylindracea</i>	10g \$160; 200 g \$320
<b>IMMABC-T3-150</b>	lipase	<i>Pseudomonas cepacia</i>	10g \$160; 200 g \$320
<b>IMMAPF-T3-150</b>	lipase	<i>Pseudomonas fluorescens</i>	10g \$160; 200 g \$320
<b>IMMARO-T3-150</b>	lipase	<i>Rhizopus oryzae</i>	10g \$160; 200 g \$320

### Immobilized Proteases

(Particle size = 150-300 µm, T1 = absorbed & dry, T2 = covalent & dry, T3 = covalent & wet)

<b>Catalog No.</b>	<b>Product Name</b>	<b>Sources/Substrates</b>	<b>Prices (US Dollars)</b>
<b>IMMALC-T2-150</b>	protease	Subtilisin ( <i>Bacillus sp.</i> )	5g \$160; 100 g \$400
<b>IMMSAV-T2-150</b>	protease	Subtilisin ( <i>Bacillus sp.</i> )	5g \$160; 100 g \$400

<b>IMMEVE-T2-150</b>	protease	Subtilisin ( <i>Bacillus sp.</i> )	5g \$160; 100 g \$400
<b>IMMESP-T2-150</b>	protease	Subtilisin ( <i>Bacillus sp.</i> )	5g \$160; 100 g \$400
<b>IMMP6-T2-150</b>	protease	<i>Bacillus licheniformis</i>	5g \$160; 100 g \$400
<b>IMMP30-T2-150</b>	protease	<i>Bacillus subtilis</i>	5g \$160; 100 g \$400
<b>IMMP40L-T2-150</b>	protease	<i>Bacillus subtilis</i>	5g \$160; 100 g \$400
<b>IMMP51-T2-150</b>	protease	<i>Aspergillus oryzae</i>	5g \$160; 100 g \$400
<b>IMMP89-T2-150</b>	protease	<i>Bacillus subtilis</i>	5g \$160; 100 g \$400
<b>IMMCAR-T2-150</b>	protease	<i>Mucor miehei</i>	5g \$160; 100 g \$400
<b>IMMP7-T2-150</b>	protease	<i>Bacillus amyloliquefaciens</i>	5g \$160; 100 g \$400
<b>IMMP14-T2-150</b>	protease	Thermolysin ( <i>Geobacillus sp.</i> )	5g \$160; 100 g \$400
<b>IMMP15-T2-150</b>	protease	<i>Trichoderma reesei</i>	5g \$160; 100 g \$400
<b>IMMP50-T2-150</b>	protease	<i>Aspergillus oryzae var.</i>	5g \$160; 100 g \$400
<b>IMMAUAC-T2-150</b>	protease	<i>Aspergillus niger</i>	5g \$160; 100 g \$400
<b>IMMAUNE-T2-150</b>	protease	<i>Bacillus subtilis</i>	5g \$160; 100 g \$400
<b>IMMAUAL-T2-150</b>	protease	<i>Bacillus subtilis</i>	5g \$160; 100 g \$400
<b>IMMPAP-T2-150</b>	protease	<i>Carica papaya</i>	5g \$160; 25 g \$320
<b>IMMBRO-T2-150</b>	protease	Pineapple stem	5g \$160; 25 g \$320
<b>IMMFIC-T2-150</b>	protease	Fig tree latex	5g \$160; 25 g \$320

### Immobilized Phospholipases

(Particle size = 150-300 µm, T1 = absorbed & dry, T2 = covalent & dry, T3 = covalent & wet)

Catalog No.	Product Name	Sources/Substrates	Prices (US Dollars)
<b>IMMLMPL-T2-150</b>	phospholipase	LysoMax	5g \$160; 100 g \$400
<b>IMMGZPL-T2-150</b>	phospholipase	G-Zyme G999	5g \$160; 100 g \$400
<b>IMMLEPL-T2-150</b>	phospholipase	Lecitase ultra	5g \$160; 100 g \$400

### Other Immobilized Enzymes

(Particle size = 150-300 µm, T1 = absorbed & dry, T2 = covalent & dry, T3 = covalent & wet)

Catalog No.	Product Name	Sources/Substrates	Prices (US Dollars)
IMMROXY-T3-150	(R)-oxynitrilase	Almonds	Inquire
IMMNeuAc-T3-150	N-acetylneuraminic acid aldolase		Inquire
IMMPenGA-T3-150	Penicillin G amidase	<i>E. coli</i>	Inquire
IMMADH-T3-150	Alcohol dehydrogenase	Various	Inquire
IMMKRED-T3-150	Ketoreductase	Various	Inquire

#### Notes:

1. Syncore provides a wide range of cost-effective and high quality contract services for enzyme R&D, fermentation, biotransformations and chemical process development.
2. The catalog products are used solely for their intended purpose as biocatalysts, and shall not be manipulated either biologically or chemically without priori notice or agreement with Syncore.