



Product list 2024

Introduction

ChiralVision offers a range of immobilized enzymes under the brand name Immozymes™. Immobilization offers easier separation and reuse of enzymes thereby making production processes more robust and cost effective. Additionally, process conditions can be chosen with increased flexibility. Our Immo beads™ are available separately for immobilizing your own enzymes.

Immozymes

A large collection of different carrier materials in varying particle sizes are screened for applicability to various enzymes. For each individual enzyme optimization of activity and stability is performed. After immobilization all Immozymes are washed extensively. Finally, they are dried yielding an enzyme that can be stored for prolonged times and used in water-free media.

Immo beads

Immobilization of enzymes and proteins in general requires special carriers. ChiralVision offers special carriers with high porosity and various binding modes for optimal immobilization. For affinity immobilization or purification Immo bead HIS-tag beads are available preloaded with nickel.

Kits

For screening purposes, all (immobilized) enzymes are available as kits for easy process development.

Lipases - Immobilized formulations		<i>Pricing in euro (ex. shipping)</i>			
Product nr.	Lipases - Immobilized formulations - Pricing in euro (ex. shipping)	<i>price / kg</i>			
		100 g	1 kg	10 kg	100 kg
IMMCALA-COV-1	lipase A from <i>Candida antarctica</i> (CaLA, NovoCor AD L ¹), covalent on IB-COV-1. Activity: 2500 TBU / g	249	1250	1125	975
IMMCALB-ADS-11	lipase B from <i>Candida antarctica</i> (CaLB1), adsorbed on acrylic beads. Activity: 11000 PLU / g	249	1425	1149	1100
IMMCALB-COV-1	lipase B from <i>Candida antarctica</i> (CaLB1), covalent on IB-COV-1. Activity: 2500 TBU / g, 5000 PLU / g	249	1150	1075	975
IMMCALB-COV-1XL	lipase B from <i>Candida antarctica</i> (CaLB1), covalent on IB-COV-1. Activity: 15000 PLU / g	349	1895	1750	1700
IMMCALBY-ADS-11	generic lipase B from <i>Candida antarctica</i> (CaLB ²), adsorbed on acrylic beads. Activity: 10000 PLU / g	249	1350	925	870
IMMCALBY-COV-1	generic lipase B from <i>Candida antarctica</i> (CaLB2), covalent on IB-COV-1. Activity: 3000 TBU/g	249	1245	855	800
IMMRML-COV-1	lipase from <i>Rhizomucor miehei</i> (Lipozyme1), covalent on IB-COV-1. Activity: 500 TBU / g	249	1950	1325	
IMMTLL-COV-1	<i>Thermomyces lanuginosa</i> lipase (Lipolase1), covalent on IB-COV-1. Activity: >5000 TBU/g, 3500 PLU/g	249	995	925	850
IMMCRL-COV-1	lipase from <i>Candida rugosa</i> (CRL3), covalent on IB-COV-1. Activity: 250 TBU / g	295	1990	1025	
IMMCCMO-COV-1	lipase from <i>C. cylindracea</i> (equal to <i>C. rugosa</i>) (lipase OF6), covalent on IB-COV-1. Activity: 500 TBU / g	249	1050	975	795
IMMABC-COV-1	lipase from <i>Pseudomonas cepacia</i> (Amano PS4), covalent on IB-COV-1. Activity: 1500 TBU / g	249	1050	1025	925
IMMAPF-COV-1	lipase from <i>Pseudomonas fluorescens</i> (Amano AK4), covalent on IB-COV-1. Activity: 750 TBU / g	249	1050	1025	925
IMMARO-COV-1	lipase from <i>Rhizopus oryzae</i> (Amano F-AP154), covalent on IB-COV-1. Activity: 500 TBU / g	249	1050	1025	925
IMMAMJ-COV-1	lipase from <i>Mucor javanicus</i> (Amano M4), covalent on IB-COV-1. Activity: 300 TBU / g	249	1250	-	
IMMANA-COV-1	lipase from <i>Aspergillus niger</i> (Lipase A4), covalent on IB-COV-1. Activity: 40 TBU / g	249	1250	-	
IMMRNA-COV-1	lipase from <i>Rhizopus niveus</i> (Lipase4), covalent on IB-COV-1. Activity: 10 TBU / g	249	1250	-	
IMMASMQ-COV-1	lipase from <i>Alcaligenes</i> sp. (lipase QLM6), covalent on IB-COV-1. Activity: 200 TBU / g	249	-	-	
IMMRES-COV-1	lipase Resinase HT (Resinase HT1), covalent on IB-COV-1. Activity: 3000 TBU / g, 6000 PLU / g	249	995	925	
IMMLIPX-COV-1	lipase Lipex 100L (Lipex 100L1), covalent on IB-COV-1. Activity: 3000 TBU / g, 6000 PLU / g	249	995	925	
IMMEVT-COV-1	lipase Eversa Transform1 (TLL mutant), covalent on IB-COV-1. Activity: 4000 TBU / g, 8000 PLU / g	249	995	925	
IMML51-COV-1	lipase from <i>H. insolens</i> (Cutinase, NZ51032, StickAway) ¹ , covalent on IB-COV-1. Activity: 5000 TBU / g, 5000 PLU / g	249	1375	1175	1060
IMML51-ADS-11	lipase from <i>Humicola insolens</i> (Cutinase, NZ51032, StickAway) ¹ adsorbed on acrylic beads. Activity: 3000 PLU / g	249	1275	1080	995
IMMAULI-COV-1	lipase from <i>Bacillus subtilis</i> (lipase7), covalent on IB-COV-1. Activity: 1000 TBU / g	249	1050	950	
IMMAULI-ADS-11	lipase from <i>Bacillus subtilis</i> (lipase7) adsorbed on acrylic beads. Activity: 2000 TBU / g	249	1050	950	
IMMLIP-1900	Immozyme lipase Kit, 19 immobilized lipases on IB-COV-1. 1 g each	999			
	1) Novozymes; 2) generic 3) Sigma-Aldrich 4) Amano; 5) Fluka; 6) Meito 7) Aum Enzymes				

Unit definition: 1 TBU unit = 1 μ mol butyric acid released per minute / g immobilized enzyme at 40°C and pH 7.5.

Unit definition: 1 PLU unit = 1 μ mol propyl laurate formed per minute / g immobilized enzyme at 60°C and pH 7.5.

Proteases - Covalently immobilized on acrylic beads		Pricing in euro (ex. shipping)		
Product nr.	Proteases - Immobilized formulations - Pricing in euro (ex. shipping)	price / kg		
		100 g	1 kg	10 kg
IMMALC-COV-2	Protease from Bacillus sp.(Subtilisin, Alcalase). Activity: 400 ELU / g.	249	845	799
IMMSAV-COV-2	Protease from Bacillus sp. (Subtilisin, Savinase). Activity: 500 ELU / g.	249	845	799
IMMEVE-COV-2	Protease from Bacillus sp. (Subtilisin, Everlase). Activity: 100 ELU / g.	249	845	799
IMMESP-COV-2	Protease from Bacillus sp. (Subtilisin, Esperase). Activity: 275 ELU / g.	249	845	799
IMMP6-COV-2	Protease from <i>Bacillus licheniformis</i> (Protex 6L, Multifect PR 6L). Activity: 400 ELU / g.	249	845	799
IMMP7-COV-2	Protease from Bacillus amyloliquefaciens (Protex 7L, Multifect PR 7L). Activity: 15 ELU / g.	249	845	799
IMMP14-COV-2	Protease from Geobacillus sp. (Thermolysin, Protex 14L, PROTEINASE T). Activity: 5 ELU / g.	249	845	799
IMMP15-COV-2	Protease from Trichoderma reesei (Protex 15L, Multifect PR 15L). Activity: 5 ELU / g.	249	845	799
IMMP30-COV-2	Protease from Bacillus subtilis (Protex 30L, Multifect PR 30L). Activity: 225 ELU / g.	249	845	799
IMMP40-COV-2	Protease from Bacillus subtilis (Protex 40L, OPTIMASE PR 40L). Activity: 400 ELU / g.	249	845	799
IMMP50-COV-2	Protease from Aspergillus oryzae var. (Protex 50 FP, Multifect PR 50G). Activity: 5 ELU / g.	249	845	799
IMMP51-COV-2	Protease from Aspergillus oryzae (Protex 51 FP, Multifect PR 51G). Activity 65 ELU/g	249	845	799
IMMP89-COV-2	Protease from Bacillus subtilis (Protex 89L, OPTIMASE PR 89L). Activity: 150 ELU/g.	249	845	799
IMMAUAC-COV-2	Protease from Aspergillus niger (Acid protease). Activity: 5 ELU / g.	249	845	799
IMMAUNE-COV-2	Protease from Bacillus subtilis (Neutral protease). Activity: 10 ELU / g.	249	845	799
IMMAUAL-COV-2	Protease from Bacillus subtilis (Alkaline protease). Activity: 175 ELU / g.	249	845	799
IMMPAP-COV-2	Protease from Carica papaya (Papain). Activity: 5 ELU / g.	299	1250	845
IMMBRO-COV-2	Protease from pineapple stem (Bromelain). Activity: 5 ELU / g.	499	2150	-
IMMFIC-COV-2	Protease from fig tree latex (Ficin). Activity: 5 ELU / g.	249	-	-
IMMACT-COV-2	Protease from kiwi (Actinidine). Activity: 5 ELU / g.	249	-	-
IMMNEU-COV-2	Neutral metallo endoprotease produced in Bacillus amyloliquefaciens (Neutrase). Activity: 20 ELU / g	249	845	799
IMMFLAV-COV-2	Aminopeptidase, exoprotease N-terminus produced in Aspergillus oryzae (Flavourzyme). Activity: 350 ELU / g	249	845	799
IMMPROT-2200	Immozyme protease Kit, 22 immobilized proteases, covalent on IB-COV-2, 1 gram each	1075	-	-
	<i>*Registered trademark from: 1-4, 21-22 Novozymes; 5-13 DuPont Industrial Biosciences; 14-16 Aum Enzymes; 17-19 Sigma, 20 KiwiEnzyme</i>			

Unit definition (ethyl lactate hydrolysis): 1 ELU unit = 1 µmol lactic acid released per minute / g immobilized enzyme at 25°C and pH 6.8.

Proteases Non-Immobilized - DuPont Industrial Biosciences	<i>Pricing in euro (ex. shipping)</i>
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ChiralVision offers 9 bulk proteases developed and produced by DuPont Industrial Biosciences

Product nr.	DuPont Industrial Biosciences proteases (not immobilized) - Pricing in euro (ex. ship)	5 g	250 ml	1 l	2.5 l
CV-P6L	Protease from <i>Bacillus licheniformis</i> (Protex 6L, Multifect PR 6L). Liquid, activity: 2440 ELU / ml.	-	135	295	549
CV-P7L	Protease from <i>Bacillus amyloliquefaciens</i> (Protex 7L, Multifect PR 7L). Liquid, activity: 100 ELU / ml.	-	135	295	695
CV-P14L	Protease from <i>Geobacillus sp.</i> (<i>Thermolysin</i> , Protex 14L, PROTEINASE T). Liquid, activity: 5 ELU / ml.	-	135	295	695
CV-P15L	Protease from <i>Trichoderma reesei</i> (Protex 15L, Multifect PR 15L). Liquid, activity: 5 ELU / ml.	-	135	295	549
CV-P30L	Protease from <i>Bacillus subtilis</i> (Protex 30L, Multifect PR 30L). Liquid, activity: 585 ELU / ml.	-	135	295	549
CV-P40L	Protease from <i>Bacillus subtilis</i> (Protex 40L, OPTIMASE PR 40L). Liquid, activity: 1630 ELU / ml.	-	135	295	549
CV-P50FP	Protease from <i>Aspergillus oryzae var.</i> (Protex 50 FP, Multifect PR 50G). Powder, activity: 20 ELU / g.	99			
CV-P51FP	Protease from <i>Aspergillus oryzae</i> (Protex 51 FP, Multifect PR 51G). Powder, activity: 570 ELU / g.	99			
CV-P89L	Protease from <i>Bacillus subtilis</i> (Protex 89L, OPTIMASE PR 89L). Liquid, Activity: 435 ELU / ml.	-	135	295	549
CV-GEN-900	- Kit with 9 proteases (non-immobilized) 20 ml or 5 g each	495			
<i>Protex, Multifect and Optimase are registered tradenames of DuPont Industrial Biosciences</i>					

Unit definition (ethyl lactate hydrolysis): 1 ELU unit = 1 µmol lactic acid released per minute / g immobilized enzyme at 25°C and pH 6.8.

Lipase Non-Immobilized	<i>Pricing in euro (ex. shipping)</i>
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Product nr.	Lipase (not immobilized) - Pricing in euro (ex. shipping)	250 ml	1 l	2.5 l	5 liter
CV-CALA	lipase A from <i>Candida antarctica</i> (CaLA, similar to NovoCor AD L), liquid, >6000 TBU / ml	135	295	549	849

Unit definition: 1 TBU unit = 1 µmol butyric acid released per minute / ml immobilized enzyme at 40°C and pH 7.5.

Screening Kits (Immobilized) Enzymes

Catalog No.	Lipase and Protease Kits - Pricing in euro (ex. shipping)	Euro
IMMHYD-4100	Immozyme hydrolase Kit, 41 immobilized enzymes: lipases (19) and proteases (22), 1 g each	1974
IMMLIP-1900	Immozyme lipase Kit, 19 immobilized lipases, 1 g each	999
IMMPROT-2200	Immozyme protease Kit, 22 immobilized proteases, 1 gram each	1075
CV-GEN-900	DuPont Industrial Biosciences protease kit, 9 proteases (non-immobilized), 20 ml or 5 g each	495

Screening Kit Immobeads

Catalog No.	Immobead enzyme carrier Kit - Pricing in euro (ex. shipping)	Euro
IMMO-14	selection of 14 enzyme carriers (for covalent, ionic and adsorption binding of enzymes), 25 g each	699 €
IMMO-COV	11 epoxide carriers for covalent enzyme binding, 25 g each	549 €
IMMO-ADS	6 adsorbing enzyme carriers, 25 g each	299 €
IMMO-ANI	11 anionic carriers for ionic binding of enzymes), 25 g each	549 €
IMMO-HIS	18 nickel loaded carriers for HIS-tag affinity binding of enzymes, 25 g each	899 €

Immobeeds for covalent, adsorption, cationic and anionic binding

Covalent

	All Immobeeds are available in bulk	euro	euro
Product# (Sunresin#)	Bead description	25 g	100 g
IB-COV-1	Covalent, very hydrophobic, polyacrylic, low epoxide and high butyl	99	125
IB-COV-2	Covalent, hydrophilic, polyacrylic, epoxide and low butyl	99	125
IB-COV-3	<i>discontinued, replaced by IB-COV-8</i>		
IB-COV-4	Covalent, very hydrophobic, polyacrylic, low epoxide and octadecyl	99	125
IB-COV-5	Covalent, hydrophobic, polyacrylic, epoxide and hexadecyl/octadecyl	99	125
IB-COV-6	Covalent, very hydrophilic, polyacrylic, epoxide and hydroxyethyl	99	125
IB-COV-7 (EMC7014M)	Covalent, hydrophilic, polyacrylic, epoxide	99	125
IB-COV-8	Covalent, very hydrophilic, polyacrylic, epoxide	99	125
IB-COV-9	Covalent, extremely hydrophilic, silica, propyl epoxide	99	125
IB-COV-10	Covalent, extremely hydrophilic, cellulose, epoxide, anionic	99	125
IB-COV-11 (EMC7025)	Covalent, hydrophilic, polyacrylic, epoxide	99	125
IB-COV-12 (EMC7032)	Covalent, hydrophobic, polyacrylic, epoxide, butyl	99	125

Adsorption

	All Immobeeds are available in bulk	euro	euro
Product# (Sunresin#)	Bead description	25 g	100 g
IB-ADS-1	Adsorption, hydrophobic, polyacrylic, hexadecyl/octadecyl	99	125
IB-ADS-4	<i>discontinued, replaced by IB-ADS-10</i>		
IB-ADS-8	Adsorption, hydrophobic, polyacrylic, low butyl	99	125
IB-ADS-9	Adsorption, extremely hydrophobic, polyacrylic, high butyl	99	125
IB-ADS-10 (EMC1040)	Adsorption, hydrophilic, polystyrene, styrene, methyl	99	125
IB-ADS-11 (EMC7528)	Adsorption, hydrophobic, polyacrylic, octadecyl	99	125
IB-ADS-12 (EMC1020)	Adsorption, hydrophobic, polystyrene / DVB, styrene	99	125

ChiralVision is an official distributor of Sunresin lifescience products

Immobeards for covalent, adsorption, cationic and anionic binding

Cationic

	All Immobeards are available in bulk	euro	euro
Product nr.	Bead description	25 g	100 g
IB-CAT-1	Cationic, strong, polystyrene, sulphonic	99	125

Anionic

	All Immobeards are available in bulk	euro	euro
Product# (Sunresin#)	Bead description	25 g	100 g
IB-ANI-5 (EMC7120M)	Anionic, hydrophobic, polyacrylic, primary, secondary amine	99	125
IB-ANI-6 (EMC7424)	Anionic, hydrophilic, polystyrene / DVB, tertiary amine	99	125
IB-ANI-7	Anionic, very hydrophilic, polyacrylic, primary, secondary amine	99	125
IB-ANI-8	Anionic, very hydrophilic, polyacrylic, primary amine	99	125
IB-ANI-9	Anionic, hydrophobic, polyacrylic, secondary, tertiary amine	99	125
IB-ANI-10	Anionic, hydrophilic, polyacrylic, primary, secondary amine	99	125
IB-ANI-11	Anionic, hydrophobic, polyacrylic, primary, secondary amine	99	125
IB-ANI-12	Anionic, extremely hydrophilic, silica, amino propyl	99	125
IB-ANI-13	Anionic, extremely hydrophilic, cellulose, primary, secondary amine	99	125
IB-ANI-14 (EMC7435)	Anionic, hydrophobic, polystyrene / DVB, quaternary amine	99	125
IB-ANI-15 (EMC7225M)	Anionic, hydrophilic, polyacrylic, short diamine spacer	99	125

ChiralVision is an official distributor of Sunresin lifescience products

Affinity Immobeards for HIS-tag binding

	All Immobeads are available in bulk	<i>euro</i>	<i>euro</i>
Product# (Sunresin#)	Bead description	25 g	100 g
IB-HIS-1	HIS-tag, very hydrophobic, polyacrylic, low IDA-nickel, high butyl	99	125
IB-HIS-2	HIS-tag, hydrophilic, polyacrylic, IDA-nickel, low butyl	99	125
IB-HIS-3	HIS-tag, very hydrophobic, polyacrylic, low IDA-nickel, octadecyl	99	125
IB-HIS-4	HIS-tag, hydrophobic, polyacrylic, IDA-nickel, hexadecyl/octadecyl	99	125
IB-HIS-7	HIS-tag, very hydrophilic, polyacrylic, IDA-nickel, hydroxyethyl	99	125
IB-HIS-8	HIS-tag, very hydrophilic, polyacrylic, IDA-nickel	99	125
IB-HIS-9	HIS-tag, very hydrophilic, polyacrylic, IDA-nickel, ammonia quenched	99	125
IB-HIS-11	HIS-tag, hydrophilic, anionic, polyacrylic, diamine, NTA-nickel	99	125
IB-HIS-14	HIS-tag, hydrophilic, anionic, polyacrylic, NTA-nickel	99	125
IB-HIS-15	HIS-tag, extremely hydrophilic, anionic, silica, aminopropyl, NTA-nickel	99	125
IB-HIS-16	HIS-tag, extremely hydrophilic, anionic, cellulose, NTA-nickel	99	125
IB-HIS-17 (Chelex7350)	HIS-tag, hydrophilic, anionic, polyacrylic, IDA and Nickel	99	125
IB-HIS-18	HIS-tag, hydrophobic, anionic, polyacrylic, diamine, NTA-nickel	99	125
IB-HIS-19	HIS-tag, very hydrophilic, anionic, polyacrylic, diamine, NTA-nickel	99	125
IB-HIS-20	HIS-tag, very hydrophilic, polyacrylic, ammonia, NTA-nickel	99	125
IB-HIS-21	HIS-tag, extremely hydrophilic, silica, propyl, IDA-nickel	99	125
IB-HIS-22	HIS-tag, extremely hydrophilic, cellulose, IDA-nickel	99	125
IB-HIS-24	HIS-tag, very hydrophilic, polyacrylic, diamine, EDTA-nickel	99	125

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Ordering information

Orders can be send to:

- sales@chiralvision.com

Please provide:

- contact person (+phone number and email address)
- shipping address
- billing email address
- internal ordering number
- VAT / EIN number (Inside EU: mandatory for tax free shipping. Outside EU: will speed up customs handling)

Shipping cost for 1 kg:

Europe (EU)	30 euro
Europe (non-EU)	50 euro
North-America	50 euro
Asia / all others	~85 euro (inquire)

Cost are based on a weight of 1 kg, for heavier shipments add 12 euro / kg.

*** Contact us for a quote in US dollars ***

ChiralVision' general Terms of Sale apply. Prices are subject to change without notice.

Sales and technical support:

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