

Enzymes



Discover our **ultra-pure** enzyme range for analytical and research applications, including measurement of dietary fiber



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"We have been using Megazyme enzymes for dietary fiber analysis since we began developing a system to automate the process. We tested the enzymes from various suppliers and found only Megazyme to provide consistent, high quality product.

For our needs, having a product with a consistent viscosity and purity is critical. Megazyme delivers to this need. Megazyme was also able to produce a specific dilution to support our instrument design, making it easier for laboratories to do the analysis.

Megazyme delivers consistent high quality enzymes and provides the level of expertise that can only come from a team that actually does the types of analyses they support."

- Chris Kelley, ANKOM Technology

The Megazyme Advantage

Diversity

Megazyme's portfolio of ultra-pure enzymes includes a wide range of enzymes for use in analytical, diagnostic and research applications.

Carbohydrate-acting enzymes (CAZYmes) are the single largest group in our enzyme range. CAZYmes are segmented according to the nature of the substrate on which they act.

We also offer other 'analytical' enzymes which are not active on carbohydrate substrates. These are listed according to their EC number.

Stability

Megazyme's enzymes are provided in various formats including:

- freeze-dried powder
- ammonium sulphate suspension
- 50% glycerol solution.

All enzymes have undergone rigorous stability studies and the recommended storage conditions are provided with every product.

Purity

At Megazyme, we take great pride in the purity of our enzymes. All of our enzymes are either produced recombinantly through various expression systems, or are purified from crude industrial enzyme formulations using conventional protein purification techniques.

Characterisation

Each enzyme is extensively characterised by our R&D scientists. A data sheet is shipped with each enzyme describing the:

- specific activity on a suitable substrate
- relative activities on any other relevant substrates
- pH / temperature activity optima and stability ranges

Enzyme Purity Compared: Megazyme vs Competitors

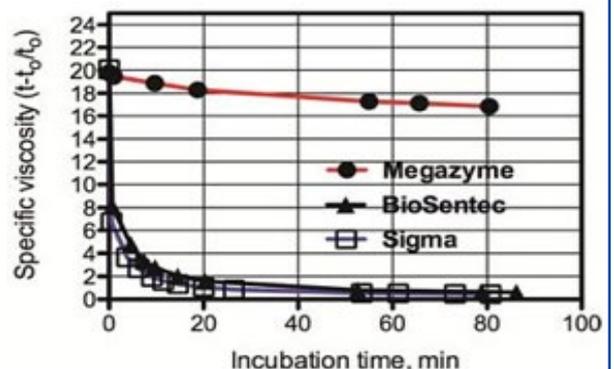
Viscometry was carried out on amyloglucosidase purchased from Megazyme and from two commercial competitors, using Medium-Viscosity Barley β -Glucan as the substrate.

Theoretical result:

The viscosity should not be influenced significantly by addition of amyloglucosidase: any drop in viscosity indicates that the amyloglucosidase used is contaminated with β -glucanase.

Actual result:

For the Sigma-Aldrich and BioSentec amyloglucosidase products, the viscosity of the β -glucan solution reduced rapidly over time, while the Megazyme amyloglucosidase product - containing **virtually no** β -glucanase contamination - had little or no effect on the viscosity, indicating a far purer product that gives customers reliable results every time.





CARBOHYDRATE ACTIVE ENZYMES (CAZYs)



Cellulose & β -Glucan

(cereal, fungal, bacterial and algal)

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form
E-CBHI	Cellobiohydrolase I	<i>Trichoderma longibrachiatum</i>	3.2.1.176	GH7	70 / 4.5	5	susp
Rec E-CBHIIM	Cellobiohydrolase II	Microbial	3.2.1.91	GH6	60 / 5.5	200	solut
E-CELAN	<i>endo</i> -1,4- β -Cellulase (<i>endo</i> -1,4- β -D-Glucanase)	<i>Aspergillus niger</i>	3.2.1.4	GH12	60 / 4.5	2000	susp
Rec E-CELBA		<i>Bacillus amyloliquefaciens</i>	3.2.1.4	GH5	60 / 6.0	7100	susp
E-CELTE		<i>Talaromyces emersonii</i>	3.2.1.4	GH5	80 / 4.5	2000	susp
Rec E-CELTH		<i>Thermobifida halotolerans</i>	3.2.1.4	GH6	60 / 8.5	300	susp
Rec E-CELTM		<i>Thermotoga maritima</i>	3.2.1.4	GH5	80 / 6.0	2000	susp
E-CELTR		<i>Trichoderma longibrachiatum</i>	3.2.1.4	GH7	70 / 4.5	1000	susp
Rec E-LAMHV	<i>endo</i> -1,3- β -D-Glucanase	<i>Hordeum vulgare</i>	3.2.1.39	GH17	50 / 5.0	5000	solut
E-LAMSE		<i>Trichoderma</i> sp.	3.2.1.39	GH16	40 / 4.5	100	susp
Rec E-EXBGTV	<i>exo</i> -1,3- β -D-Glucanase	<i>Trichoderma virens</i>	3.2.1.58	GH55	50 / 4.5	400	susp
Rec E-EXG5AO		<i>Aspergillus oryzae</i>	3.2.1.58	GH5	50 / 5.0	500	susp
E-EXBGOS	<i>exo</i> -1,3- β -D-Glucanase & β -Glucosidase	<i>Trichoderma</i> sp.	3.2.1.58	GH55	40 / 4.0	300	susp
		<i>Aspergillus niger</i>	3.2.1.21	GH3		60	susp
E-BGLUC	β -Glucosidase	<i>Aspergillus niger</i>	3.2.1.21	GH3	70 / 4.0	200	susp
Rec E-BGOSAG		<i>Agrobacterium</i> sp..	3.2.1.21	GH1	50 / 6.5	600	susp
Rec E-BGOSPC		<i>Phanerochaete chrysosporium</i>	3.2.1.21	GH3	70 / 5.0	1380	susp
Rec E-BGOSTM		<i>Thermotoga maritima</i>	3.2.1.21	GH1	90 / 7.0	460	susp
E-LICHN	Lichenase (<i>endo</i> -1,3:1,4- β -D-Glucanase)	<i>Bacillus subtilis</i>	3.2.1.73	GH16	60 / 6.0	5000	susp
Rec E-LICACT	Non-specific <i>endo</i> -1,3(4)- β -Glucanase	<i>Clostridium thermocellum</i>	3.2.1.6	GH16	60 / 6.5	5000	solut
E-PROTOF	<i>exo</i> -1,3- β -glucanase and <i>endo</i> -1,3- β -glucanase)		N/A	N/A	37 / 5.0	~ 1250	susp
						~ 160	

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder





Xylan

Including Arabinoxylan, Glucuronoxylan & Xyloglucan

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form
Rec E-AXEAO-1KU	Acetylxylan esterase	<i>Orpinomyces</i> sp.	3.1.1.72	CE6	40 / 7.0	1000	susp
Rec E-AXEAO-3KU						3000	
Rec E-ABFUM	α -L-Arabinofuranosidase	<i>Ustilago maydis</i>	3.2.1.55	GH62	40 / 5.0	400	susp
Rec E-AFAM2		<i>Bifidobacterium adolescentis</i>	3.2.1.55	GH43	50 / 6.0	400	susp
Rec E-ABFAN		<i>Aspergillus nidulans</i>	3.2.1.55	GH62	40 / 4.5	500	susp
Rec E-ABFBO17		<i>Bacteroides ovatus</i>	3.2.1.55	GH43	40 / 6.5	2000	solut
Rec E-ABFBO25		<i>Bacteroides ovatus</i>	3.2.1.55	GH43	40 / 6.5	200	solut
E-AFASE		<i>Aspergillus niger</i>	3.2.1.55	GH51	40 / 4.0	480	susp
Rec E-FAERU		Feruloyl esterase	Rumen microorganism	3.1.1.73	CE1	40 / 7.0	1000
Rec E-FAEZCT	<i>Clostridium thermocellum</i>		3.1.1.73	CE1	60 / 6.0	10	susp
Rec E-AGUBS	α -Glucuronidase	<i>Geobacillus stearothermophilus</i>	3.2.1.139	GH67	70 / 7.0	200	solut
Rec E-GERF	Glucuronoyl esterase	<i>Ruminococcus flavefaciens</i>	3.1.1.B11	CE15	40 / 7.0	250	susp
E-XYAN4	endo-1,4- β -Xylanase	<i>Aspergillus niger</i>	3.2.1.8	GH11	60 / 4.5	8000	susp
Rec E-XYLATM		<i>Thermotoga maritima</i>	3.2.1.8	GH10	80 / 5.0	7500	susp
Rec E-XYLNP		<i>Neocallimastix patriciarum</i>	3.2.1.8	GH11	50 / 6.0	20000	susp
Rec E-XYNACJ		<i>Cellvibrio japonicus</i>	3.2.1.8	GH10	60 / 5.0	500	susp
Rec E-XYNBS		<i>Bacillus stearothermophilus</i> T6	3.2.1.8	GH10	70 / 6.5	2000	susp
E-XYRU6		Rumen microorganism	3.2.1.8	GH11	55 / 6.0	8000	susp
E-XYTR1		<i>Trichoderma viride</i>	3.2.1.8	GH11	50 / 4.5	8000	susp
E-XYTR3		<i>Trichoderma longibrachiatum</i>	3.2.1.8	GH11	50 / 6.0	8000	susp
Rec E-XEGP	Xyloglucanase	<i>Paenibacillus</i> sp.	3.2.1.151	GH5	50 / 5.5	3000	susp
Rec E-XGP74			3.2.1.155	GH74	70 / 6.0	200	susp
			3.2.1.151				
Rec E-AXSEC	α -Xylosidase	<i>Escherichia coli</i>	3.2.1.177	GH31	50 / 7.0	20	susp
Rec E-BXSEBP	β -Xylosidase	<i>Bacillus pumilus</i>	3.2.1.37	GH43	35 / 7.5	200	susp
Rec E-BXSR-1KU		<i>Selenomonas ruminantium</i>	3.2.1.37	GH43	50 / 5.0	1000	susp
Rec E-BXSR- 3KU						3000	

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder

Mannan

Including Glucomannan & Galactomannan

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form
E-AGLAN	α-Galactosidase	<i>Aspergillus niger</i>	3.2.1.22	GH36	60 / 4.5	2000	susp
E-AGLANP		<i>Aspergillus niger</i>	3.2.1.22	GH36	60 / 4.5	3000	powd
E-AGLGU		Guar	3.2.1.22	GH27	40 / 4.5	1000	susp
^{Rec} E-BMABC	endo-1,4-β-Mannanase	<i>Bacillus circulans</i>	3.2.1.78	GH5	60 / 7.5	1000	susp
E-BMABS		<i>Bacillus sp.</i>	3.2.1.78	GH26	65 / 8.8	2000	susp
^{Rec} E-BMACJ		<i>Cellvibrio japonicus</i>	3.2.1.78	GH26	50 / 7.0	10000	susp
E-BMANN		<i>Aspergillus niger</i>	3.2.1.78	GH26	60 / 3.0	600	susp
^{Rec} E-BMOSCF	β-Mannosidase	<i>Cellulomonas fimi</i>	3.2.1.25	GH2	35 / 6.5	200	susp

Fructan

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form
E-FRMXLQ	Fructanase Mixture (endo- & exo-Inulinase, non-recombinant)	<i>Aspergillus sp.</i>	3.2.1.80	GH32	40 / 4.5	20000	solut
E-FRMXPD			3.2.1.7				
E-FRLQPU	Fructanase Mixture (endo- & exo-inulinase, ultrapure, recombinant)	<i>Aspergillus niger</i>	3.2.1.7	GH32	60 / 4.5	20000	solut
E-FRPDP			3.2.1.80				
^{Rec} E-ENDOIAN	endo-Inulinase	<i>Aspergillus niger</i>	3.2.1.7	GH32	60 / 4.5	500	susp
^{Rec} E-ENLEV	endo-Levanase	<i>Bacteroides thetaiotaomicron</i>	3.2.1.65	GH32	50 / 6.0	1000	susp
^{Rec} E-EXOIAN	exo-Inulinase	<i>Aspergillus niger</i>	3.2.1.80	GH32	60 / 4.5	5000	susp
			3.2.1.26				
E-INVPD-2G	Invertase	Yeast	3.2.1.26	GH32	60 / 4.5	600000	powd
E-INVPD-5G						1500000	
E-INVRT		Yeast	3.2.1.26	GH32	60 / 4.5	200000	solut
E-SUCR	Sucrase (Maltase)	Yeast	3.2.1.20	G13	30 / 6.8	300	powd
E-SUCRBG	Sucrase plus β-Galactosidase	Yeast	3.2.1.20		40 / 5.0	170	powd
		<i>Aspergillus niger</i>	3.2.1.23			3000	

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder



Starch & Pullulan

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form	
E-ANAAM	α-Amylase	<i>Aspergillus oryzae</i>	3.2.1.1	GH13	50 / 5.0	20000	susp	
E-BAASS		<i>Bacillus amyloliquefaciens</i>	3.2.1.1	GH13	65 / 6.5	2900	solut	
E-BLAAM-10ML		<i>Bacillus licheniformis</i>	3.2.1.1	GH13	75 / 6.5	30000	solut	
E-BLAAM-40ML						120000	solut	
E-BLAAM-100ML						300000	solut	
E-BLAAM-A-100ML						75000	solut	
E-BSTAA		<i>Bacillus sp.</i>	3.2.1.1	GH13	100 / 7.0	3000	solut	
E-PANAA-4G		Porcine Pancreatic	3.2.1.1	GH13	53 / 6.9	300000	powd	
E-PANAA-12G						900000	powd	
^{Rec} E-BAMBC		β-Amylase	<i>Bacillus cereus</i>	3.2.1.2	GH14	40 / 6.5	20000	susp
E-BARBL-20KU	<i>Hordeum vulgare</i>		3.2.1.2	GH14	60 / 6.0	20000	susp	
E-BARBL-50KU						50000	susp	
E-BARBP-1G	<i>Hordeum vulgare</i>		3.2.1.2	GH14	60 / 6.0	20000	powd	
E-BARBP-2G						40000	powd	
E-MAST	Malt Amylase Standard (α-Amylase & β-Amylase)		<i>Hordeum vulgare</i>	3.2.1.1	GH13	40 / 4.6	654 °L 2,248 °WK	solut
E-MASTP		3.2.1.2		GH14	40 / 4.6	11,700 °L 39,350 °WK	powd	
E-AMGDF-10ML	Amyloglucosidase	<i>Aspergillus niger</i>	3.2.1.3	GH15	70 / 4.0	32600	solut	
E-AMGDF-40ML						130400	solut	
E-AMGDF-100ML						326000	solut	
E-AMGDF-A-100ML						326000	solut	
E-AMGDFPD		<i>Aspergillus niger</i>	3.2.1.3	GH15	70 / 4.0	144000	powd	
E-AMGDFNG-20ML		<i>Aspergillus niger</i>	3.2.1.3	GH15	70 / 4.0	130400	solut	
E-AMGDFNG-50ML						326000	solut	
E-AMGFR-100MG		<i>Aspergillus niger</i>	3.2.1.3	GH15	70 / 4.0	~ 3500	powd	
E-AMGFR-500MG						~ 17500	powd	
E-AMGPU		<i>Rhizopus sp.</i>	3.2.1.3	GH15	60 / 5.5	5000	powd	
^{Rec} E-GAMP		<i>Hormoconis resiniae</i>	3.2.1.3	GH15	60 / 4.5	800	susp	
E-MALTS		α-Glucosidase	Yeast	3.2.1.20	GH13	40 / 6.8	2000	susp
E-TRNGL			<i>Aspergillus niger</i>		GH31	70 / 4.5	2000	susp
E-TSAGL	<i>Bacillus stearothermophilus</i>		GH13		60 / 6.5	1500	susp	
^{Rec} E-TSAGS	<i>Bacillus stearothermophilus</i>		GH13		60 / 6.5	3000	susp	
E-BGOG	Oligo-α-1,6-Glucosidase plus β-Galactosidase	Microbial	3.2.1.10	GH35	50 / 4.5	10000	susp	
		<i>Aspergillus niger</i>	3.2.1.23	GH13		10000		
^{Rec} E-OAGUM	Oligo-α-1,6-Glucosidase	Microbial	3.2.1.10	GH13	50 / 4.5	3000	susp	
E-ISAMY	Isoamylase (Glycogen 6-gluconohydrolase)	<i>Pseudomonas sp.</i>	3.2.1.68	GH13	50 / 4.0	5000	susp	
E-ISAMYHP						<i>Flavobacterium odoratum</i>	3.2.1.68	GH13
E-ISAMYFO-200U		800						
E-ISAMYFO-800U								
E-PULBL	Pullulanase	<i>Bacillus licheniformis</i>	3.2.1.41	GH13	55 / 5.0	2000	susp	
E-PULKP		<i>Klebsiella planticola</i>	3.2.1.41	GH13	40 / 5.0	700	susp	

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder

Pectin

Including Arabinan, Galactan, Rhamnogalacturonan and Polygalacturonic Acid

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form
Rec E-ARBACJ	endo-/exo-Arabinanase	<i>Cellvibrio japonicus</i>	3.2.1.99	GH43	40 / 7.0	3000	susp
E-EARAB	endo-1,5- α -Arabinanase	<i>Aspergillus niger</i>	3.2.1.99	GH43	40 / 4.0	400	susp
E-EGALN	endo-1,4- β -Galactanase	<i>Aspergillus niger</i>	3.2.1.89	GH53	50 / 4.0	1000	susp
Rec E-GALCJ		<i>Cellvibrio japonicus</i>	3.2.1.89	GH53	40 / 8.0	1500	susp
Rec E-GALCT		<i>Clostridium thermocellum</i>	3.2.1.89	GH53	60 / 4.5	770	susp
E-BGLAN	β -Galactosidase	<i>Aspergillus niger</i>	3.2.1.23	GH35	60 / 5.0	8000	susp
Rec E-ECBGAL	β -Galactosidase	<i>Escherichia coli</i>	3.2.1.23	GH2	40 / 6.5	1200	susp
E-PCLYAN	Pectate lyase	<i>Aspergillus</i> sp.	4.2.2.2	PL1	55 / 8.0	7000	solut
E-PCLYAN2			4.2.2.2	PL1	40 / 8.0	7500	susp
Rec E-PLYCJ		<i>Cellvibrio japonicus</i>	4.2.2.2	PL10	62 / 10.0	2500	susp
E-PGALPC	endo-Polygalacturonanase	<i>Pectobacterium carotovorum</i>	3.2.1.15	GH28	50 / 6.0	5000	susp
E-PGALUSP		<i>Aspergillus aculeatus</i>	3.2.1.15	GH28	50 / 5.5	5000	susp
Rec E-EXPGA	exo-Polygalacturonase	<i>Yersinia enterocolitica</i>	3.2.1.82	GH28	60 / 6.0	500	susp
Rec E-RHAMS	α -Rhamnosidase	Prokaryote	3.2.1.40	GH78	50 / 6.5	3000	susp

Miscellaneous CAZymes

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form
Rec E-CHITN	Chitinase	<i>Clostridium thermocellum</i>	3.2.1.14	GH18	40 / 6.2	5	susp
Rec E-ALGLS	Alginate lyase	<i>Sphingomonas</i> sp.	4.2.2.3	PL7	40 / 7.2	5000	susp
Rec E-TREH	Trehalase	Prokaryote	3.2.1.28	GH37	40 / 5.5	8400	susp
Rec E-XANLB	Xanthan lyase	<i>Bacillus</i> sp.	4.2.2.12	PL8	40 / 6.0	20000	susp
Rec E-BNAHP	β -N-Acetylgalactosaminidase	Prokaryote	3.2.1.52	GH20	60 / 4.0	100	susp
Rec E-FUCTM	α -Fucosidase	<i>Thermotoga maritima</i>	3.2.1.51	GH29	95 / 5.0	10	susp
Rec E-FUCHS	α -(1,2,3,4,6)-L-Fucosidase	<i>Homo sapiens</i>	3.2.1.51	GH29	50 / 4.0	10	susp
Rec E-BGLAEC	β -Glucuronidase	<i>Escherichia coli</i>	3.2.1.31	GH2	37 / 6.8	500000	solut
Rec E-AMANBT	α -D-Mannosidase	<i>Bacteroides thetaiotaomicron</i>	3.2.1.24	GH38	40 / 6.5	10	susp
				GH92			
Rec E-SIALCP	exo- α -Sialidase	<i>Clostridium perfringens</i>	3.2.1.18	GH33	37 / 7.0	50	susp
Rec E-SIALST		<i>Salmonella typhimurium</i>				250	susp
E-DEXT	Dextranase	<i>Chaetomium</i> sp.	3.2.1.11	N/A	60 / 5.0	320000	solut

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder



Glycobiology Enzymes

Product code	Product name	Source organism	EC number	CAZy family	T (°C) / pH optima	Activity per vial (U)	Form
Rec E-BNAHP	β -N-Acetylhexosaminidase	Prokaryote	3.2.1.52	GH20	60 / 4.0	100	susp
Rec E-FUCTM	α -Fucosidase	<i>Thermotoga maritima</i>	3.2.1.51	GH29	95 / 5.0	10	susp
Rec E-FUCHS	α -(1-2,3,4,6)-L-Fucosidase	<i>Homo sapiens</i>	3.2.1.51	GH29	50 / 4.0	10	susp
E-AGLAN	α -Galactosidase	<i>Aspergillus niger</i>	3.2.1.22	GH36	60 / 4.5	2000	susp
E-AGLANP						3000	powd
Rec E-AGLUTM	α -Glucosidase	<i>Thermotoga maritima</i>	3.2.1.20	GH4	80 / 7.5	500	solut
Rec E-TSAGS		<i>Bacillus stearothermophilus</i>		GH13	60 / 6.5	6000	susp
Rec E-BGLAEC	β -Glucuronidase	<i>Escherichia coli</i>	3.2.1.31	GH2	37 / 6.8	500000	solut
Rec E-AMANBT	α -D-Mannosidase	<i>Bacteroides thetaiotaomicron</i>	3.2.1.24	GH92	40 / 6.5	10	susp
Rec E-SIALCP	exo- α -Sialidase	<i>Clostridium perfringens</i>	3.2.1.18	GH33	37 / 7.0	5	susp
Rec E-SIALST		<i>Salmonella typhimurium</i>				250	susp
Rec E-AXSEC	α -Xylosidase	<i>Escherichia coli</i>	3.2.1.177	GH31	50 / 7.0	20	susp

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder





ANALYTICAL ENZYMES





Oxidoreductases

Dehydrogenases and Oxidases & Peroxidases

Product code	Product name	Source organism	EC number	T (°C) / pH optima	Activity per vial (U)	Form
DEHYDROGENASES						
Rec E-FDHCB	Formate dehydrogenase	<i>Candida boidinii</i>	1.2.1.2	37 / 7.6	300	susp
Rec E-GALDH	Galactose dehydrogenase	Prokaryote	1.1.1.48	40 / 8.6	200	susp
Rec E-GALMUT	Galactose dehydrogenase - Galactose mutarotase	<i>Escherichia coli</i>	1.1.1.48	25 / 8.6	200	susp
			5.1.3.3		4 g	
E-GPDH5	Glucose-6-phosphate dehydrogenase	<i>Leuconostoc mesenteroides</i>	1.1.1.49	40 / 7.8	5000	susp
Rec E-GPDHEC		<i>Escherichia coli</i>		25 / 7.6	5000	susp
Rec E-HBDH	3-Hydroxybutyrate dehydrogenase	Prokaryote	1.1.1.30	25 / 8.0	200	susp
Rec E-INDHBS	<i>myo</i> -Inositol dehydrogenase	<i>Bacillus subtilis</i>	1.1.1.18	25 / 9.6	500	susp
Rec E-DLDHLM	D-Lactate dehydrogenase	<i>Leuconostoc mesenteroides</i>	1.1.1.28	37 / 7.0	22000	susp
Rec E-LLDHP	L-Lactate dehydrogenase	Porcine	1.1.1.27	37 / 7.0	6000	susp
Rec E-LMDHEC	L-Malate dehydrogenase	<i>Escherichia coli</i>	1.1.1.37	25 / 7.5	50000	susp
Rec E-MNHPF	Mannitol dehydrogenase	<i>Pseudomonas fluorescens</i>	1.1.1.67	40 / 8.6	500	susp
Rec E-PGDHEC	6-Phosphogluconate dehydrogenase	<i>Escherichia coli</i>	1.1.1.44	25 / 7.6	150	susp
Rec E-XYLMUT	Xylose dehydrogenase & Xylose mutarotase		1.1.1.175	25 / 7.5	150	solut
			5.1.3.3		5 mg	
OXIDASES & PEROXIDASES						
Rec E-DIAEC	Diaphorase	<i>Escherichia coli</i>	1.8.1.4	25 / 9.0	1000	susp
E-GOXCA	Glucose oxidase - Catalase Mixture	Eukaryote	1.1.3.4	30 / 7.0	12000	powd
			1.1.1.16		300000	
Rec: recombinant enzyme			susp: suspension – solut: solution – powd: powder			

Isomerases

Product code	Product name	Source organism	EC number	T (°C) / pH optima	Activity per vial (U)	Form
Rec E-PGIBS	Phosphoglucose isomerase	<i>Bacillus subtilis</i>	5.3.1.9	40 / 7.6	5000 50000	susp
Rec E-PGIEC		<i>Escherichia coli</i>	5.3.1.9	40 / 7.6	10000 50000	susp
Rec E-PGISC		<i>Saccharomyces cerevisiae</i>	5.3.1.9	40 / 7.6	5000 50000	susp
Rec E-PMIEC		Phosphomannose isomerase	<i>Escherichia coli</i>	5.3.1.8	40 / 7.6	1000

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder

Transferases

Kinases, Transacetylases, Transaminases, Synthases & Mutases

Product code	Product name	Source organism	EC number	T (°C) / pH optima	Activity per vial (U)	Form
KINASES						
Rec E-CMPK	Cytidylate kinase	Prokaryote	2.7.4.25	25 / 7.6	500	susp
Rec E-GMPK	Guanylate kinase	Prokaryote	2.7.4.8	25 / 7.6	500	susp
E-HEX10	Hexokinase	Yeast	2.7.1.1	40 / 7.6	10000	susp
Rec E-HKGDH	Hexokinase / Glucose-6-phosphate dehydrogenase	Yeast	2.7.1.1	40 / 7.4	4200	susp
		<i>Leuconostoc mesenteroides</i>	1.1.1.49		2100	
E-UMPK	Uridylate kinase	Prokaryote	2.7.4.22	25 / 7.6	150	susp
TRANSACETYLASES						
Rec E-PTABS	Phosphotransacetylase	<i>Bacillus subtilis</i>	2.3.1.8	25 / 7.4	3000	susp
TRANSAMINASES						
Rec E-GOTEC	Glutamate oxaloacetate transaminase	<i>Escherichia coli</i>	2.6.1.1	25 / 8.5	5000	susp
Rec E-GPTBS	Glutamate pyruvate transaminase	<i>Bacillus subtilis</i>	2.6.1.21	25 / 7.5	2500	susp
SYNTHASES						
Rec E-SCOAS	Succinyl-CoA synthetase	Prokaryote	6.2.1.5	25 / 8.4	550	susp
MUTASES						
Rec E-PGM	Mutase (α -Phosphoglucomutase)	Microbial	5.4.2.2	37 / 7.4	3000	solut

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder



Hydrolases

Amidinohydrolases, Proteases & Phosphatases

Product code	Product name	Source organism	EC number	T (°C) / pH optima	Activity per vial (U)	Form
AMIDO & AMIDINOHYDROLASES						
Rec E-ASNEC	Asparaginase	<i>Escherichia coli</i>	3.5.11	37 / 8.0	400	susp
Rec E-GLUTEC	Glutaminase	<i>Escherichia coli</i>	3.5.12	37 / 4.9	2500	susp
PROTEASES						
E-BROM	Bromelain from pineapple stems	<i>Ananas comosus</i>	3.4.22.32	60 / 7.0	1000	Susp
E-PAPN	Papain	<i>Carica papaya</i>	3.4.22.2	65 / 7.0	2750	Susp
E-BSPRPD	Protease (Subtilisin A from <i>Bacillus licheniformis</i>)	<i>Bacillus licheniformis</i>	3.4.21.62	60 / 7.0	1000	powd
E-BSPRT-10ML					3500	solut
E-BSPRT-40ML					14000	solut
E-BSPRT-100ML					35000	solut
E-BSPRT-A-100ML					17500	solut
PHOSPHATASES						
Rec E-ACPEC	Phosphatase (Acid)	<i>Escherichia coli</i>	3.1.3.2	45 / 5.0	400	susp
Rec E-ALPEC	Phosphatase (Alkaline)	<i>Escherichia coli</i>	3.1.3.1	37 / 10.4	400	susp
Rec: recombinant enzyme			susp: suspension – solut: solution – powd: powder			



Enzymes for the Measurement of Dietary Fiber

Megazyme is the expert in dietary fiber analysis, having developed the most advanced AOAC-recognised method for its measurement (AOAC 2017.16, the Rapid Integrated Dietary Fiber Method.)

Our dietary fiber range includes enzymes suitable for use with all mainstream methods of dietary fiber analysis, recognising the 2009 Codex definition of total dietary fiber as well as methods designed for use with earlier definitions.



Product code	Product name	EC number	CAZy family	T (°C) / pH optima	Pack Size	Form
Rapid Integrated Total Dietary Fiber Method (AOAC 2017.16)						
E-PANAA-4G	α -Amylase (Porcine pancreatic)	3.2.1.1	GH13	53 / 6.9	4 g	powd
E-PANAA-12G					12 g	
E-AMGDFNG-20ML	Amyloglucosidase (<i>A. niger</i>) Glycerol Free	3.2.1.3	GH15	70 / 4.0	20 mL	solut
E-AMGDFNG-50ML					50 mL	
E-AMGDFFD	Amyloglucosidase (<i>A. niger</i>) Powder	3.2.1.3	GH15	70 / 4.0	4 g	powd
E-BSPRPD	Protease Subtilisin A (from <i>B. licheniformis</i>) Powder	3.4.21.62		60 / 7.0	1 g	powd
Integrated Total Dietary Fiber Method (AOAC 2009.01/2011.25)						
E-PANAA-4G	α -Amylase (Porcine pancreatic)	3.2.1.1	GH13	53 / 6.9	4 g	powd
E-PANAA-12G					12 g	
E-AMGDF-10ML	Amyloglucosidase (<i>A. niger</i>)	3.2.1.3	GH15	70 / 4.0	10 mL	solut
E-AMGDF-40ML					40 mL	
E-AMGDF-100ML					100 mL	
E-BSPRT-10ML	Protease (Subtilisin A from <i>Bacillus licheniformis</i>)	3.4.21.62		60 / 7.0	10 mL	solut
E-BSPRT-40ML					40 mL	
E-BSPRT-100ML					100 mL	
Prosky/Lee Method (AOAC 985.29/991.43)						
E-BLAAM-10ML	α -Amylase (<i>B. licheniformis</i>)	3.2.1.1	GH13	53 / 6.9	10 mL	powd
E-BLAAM-40ML					40 mL	
E-BLAAM-100ML					100 mL	
E-AMGDF-10ML	Amyloglucosidase (<i>A. niger</i>)	3.2.1.3	GH15	70 / 4.0	10 mL	solut
E-AMGDF-40ML					40 mL	
E-AMGDF-100ML					100 mL	
E-AMGDF-A-100ML	Amyloglucosidase (<i>A. niger</i>) for use with ANKOM Analyser	3.2.1.3	GH15	70 / 4.0	100 mL	solut
E-BSPRT-10ML	Protease (Subtilisin A from <i>Bacillus licheniformis</i>)	3.4.21.62		60 / 7.0	10 mL	solut
E-BSPRT-40ML					40 mL	
E-BSPRT-100ML					100 mL	
E-BSPRT-A-100ML	Protease (Subtilisin A from <i>B. licheniformis</i>) for use with ANKOM Analyser	3.2.1.3	GH15	70 / 4.0	100 mL	solut

Rec: recombinant enzyme

susp: suspension – solut: solution – powd: powder



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