

Megazyme International

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Pure Enzymes for Starch Research

Isoamylase (E-ISAMY)

- ♦ for complete debranching of starch and glycogen.
- ♦ Ultrapure. Contaminating enzymes < 1 part in 10^6 (by activity).

Pullulanase (E-PULKP)

- ♦ for partial but controlled debranching of starch.
- ♦ Affinity purified. Contaminating enzymes < 1 part in 10^5 (by activity).



β -Amylase (barley) (E-BARBL)

- ♦ removal of maltosyl units from the non-reducing ends of maltodextrin chains.
- ♦ Recrystallised. Contaminating enzymes < 1 part in 10^6 (by activity).

α -Amylase (*B. amyloliquefaciens*) (E-BAASS)

- ♦ for analysing the cluster structure of starches (Bertoft et al, 2012*).
 - ♦ highly purified. Contaminating enzymes < 1 part in 10^6 (by activity).
- * Bertoft, E., Koch, K. & Aman, P. (2012) Building block organisation of clusters in amylopectins of different structural types, Int. J. Biol. Macromol., 50, 1212-1223.

Amyloglucosidase (*Rhizopus sp.*) (E-AMGPU)

- ♦ for complete hydrolysis of soluble starch. No action on blocked substrates.
- ♦ Ultrapure. Contaminating enzymes < 1 part in 10^7 (by activity).

Amyloglucosidase (*H. resinae*) (E-GAMP)

- ♦ for complete hydrolysis of soluble starch. No action on blocked substrates.
- ♦ Recombinant / affinity purified. Contaminating enzymes < 1 part in 10^7 (by activity).

α -Glucosidase (yeast) (E-MALTS)

- ♦ rapidly hydrolyses maltose and maltotriose. Not active on α -1,6-linked D-glucose.
- ♦ Ultrapure. Contaminating enzymes < 1 part in 10^7 (by activity).

α -Glucosidase (*B. Stearotherophilus*) (E-TSAGS)

- ♦ rapidly hydrolyses all α -1,4-linked maltodextrins.
- ♦ Recombinant / affinity purified. Contaminating enzymes < 1 part in 10^7 (by activity).



Setting the Standard for Purity, Quality & Innovation in Starch Research



Pure Research Enzymes

Isoamylase (E-ISAMY)
Pullulanase (E-PULKP)
 α -Glucosidase (yeast) (E-MALTS)
Thermostable α -Glucosidase (E-TSAGS)
Amyloglucosidase (*Rhizopus*) (E-AMGPU)
Amyloglucosidase (*H. resinae*) (E-GAMP)
 β -Amylase (barley) (E-BARBL)
 β -Amylase (*B. cereus*) (E-BAMBC)
 α -Amylase (*A. oryzae*) (E-ANAAM)
 α -Amylase (*B. amyloliquefaciens*) (E-BAASS)

Purified Enzymes for Specific Analytical Applications

α -Amylase (thermostable *B. licheniformis*)
(E-BLAAM)
(for starch and dietary fibre determination)
AOAC Method 985.29 / 991.43
AACC Method 35-05.01 / 32-07.01

α -Amylase (porcine pancreas) (E-PANAA)
(for integrated total dietary fibre method)
AOAC Method 2009.01 / 2011.25
AACC Method 32-45.01 / 32-50.01

Amyloglucosidase (E-AMGDF)
(for starch and dietary fibre determination)
AOAC Method 985.29 / 991.43
AACC Method 32-05.01 / 32-07.01

Amyloglucosidase (E-AMGPD)
(for fructan determination method)
AOAC Method 997.08

Oligosaccharides

6³- α -D-Glucosyl-maltoriose (O-GMT)
6³- α -D-Glucosyl-maltotriosyl-maltotriose
(O-GMH)



Analytical Kits

Total Starch (K-TSTA)
AOAC Method 996.11
AACC Method 76-13.01
Resistant Starch (K-RSTAR)
AOAC Method 2002.02
AACC Method 32-40.01
Damaged Starch (K-SDAM)
AOAC Method 76.31.01
Amylose / Amylopectin (K-AMYL)
 α -Amylase (Ceralpha) (K-CERA)
AOAC Method 2002.01
AACC Method 22-02.01
 β -Amylase (Betamyl-3) (K-BETA3)
Amyloglucosidase Reagent (R-AMGR3)

Test Tablets

Amylzyme (T-AMZ200)
AACC Method 33-05.01
Amylzyme BG (T-AMZBG200)
Amylzyme Red (T-AMZRD200)

Soluble Chromogenic Substrates

Red Starch (S-RSTAR)

Insoluble Chromogenic Substrates

AZCL-Amylose (I-AZAMY)

Nitrophenyl- & Naphthyl- Oligosaccharides

Blocked *p*-Nitrophenyl Maltoheptaoside
(O-BPNPC7)
p-Nitrophenyl β -D-Maltotrioside (O-PNPBG3)
Naphthyl β -D-maltotrioside (O-NBG3)

ISO 9001:2008 Registered

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