

Alpha-amylase isozyme 3A (AMY1.2), Recombinant Protein

Cat RP13444

Size 0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg
(Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-
Cell)
Oryza sativa subsp. japonica (Rice)

Full Product Name

Recombinant Oryza sativa subsp. japonica Alpha-amylase isozyme 3A (AMY1.2)

Product Gene Name

AMY1.2 recombinant protein

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

QTQILFQGFN WDSWKKQGGW YNMLKDQVGD IASAGVTHVW LPPPTHSVSP QGYMPGRLYD LNASKYGTKA
ELKSLIAAFH AKGIKCVADI VVNHRCADDK DGRGVYCIFK GGGPRGCLDW GPSMICDDT QYSDGTGHRD
TGADFAAAPD IDHLNPLVQR ELSDWLRWLR RDVGFDGWRL DFAKGYSAAV ARTYVQNARP SFVVAEIWNS
LSYDGDGKPA ANQDQGQRQEL VNWVKQVGGP ATAFDFTTKG ILQSAVQGEL WRMRDKDGKA PGMIGWYPEK
AVTFVDNHDT GSTQRMWFPF SDKVILGYAY ILTHPGVPCI FYDHVFDWNL KQEINALAAT RKRNGINAGS
KLRVLAAESD MYVAMVDERV ITKIGPRIDV GNIIPSDFHI VAHGNDYCVW EKSGLRVPEP EGRR

Sequence Positions

27-440, Full length protein

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or Yeast or Baculovirus or Mammalian Cell

Molecular Weight

48,868 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week.
Repeated freezing and thawing is not recommended.

Protein Family

Alpha-amylase

NCBI Accession

XP_015612112.1

NCBI GI

1002297371

NCBI GenBank Nucleotide

XM_015756626.1

NCBI GeneID

4347262

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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(Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg
(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-
Cell)

NCBI Official Symbol

LOC4347262

NCBI Official Synonym Symbols

AMY3A; AMY1.2; RAmY3A; B1045B05.8

NCBI Protein Information

alpha-amylase isozyme 3A

UniProt Gene Name

AMY1.2

UniProt Synonym Gene Names

AMY3A

UniProt Protein Name

Alpha-amylase isozyme 3A

UniProt Synonym Protein Names

1,4-alpha-D-glucan glucanohydrolase

UniProt Primary Accession

P27932

UniProt Secondary Accession

Q0J184; Q67U05

UniProt Related Accession

P27932

UniProt Comments

Important for breakdown of endosperm starch during germination. Miscellaneous Binds starch not only at the active site, but also via accessory binding sites on the protein surface that are important for efficient binding to starch granules and thereby increase enzyme activity.

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