

GDSL esterase/lipase ESM1 (ESM1), Recombinant Protein

Cat *RP01852*

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)
Species Arabidopsis thaliana (Mouse-ear cress)

Full Product Name

Recombinant Arabidopsis thaliana GDSL esterase/lipase ESM1 (ESM1)

Product Gene Name

ESM1 recombinant protein

Product Synonym Gene Name

ESM1

Purity

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

Sequence

GEGVPNVALF TFGDSYYDAG NKVFLSQRKD LPQTYWPYGK SRDYPNGKFS DGHIVPDFIA DFISIPNGVL
PPVLKPGVDI SRGVSAFVAD ASILGAPVES MTLNQQVVKF KNMKSNNWDS YIEKSLFMIY IGTEDYLNFT
KANPNADASA QQAFVTNVIN RLKNDIKLLY SLGASKFVVQ LLAPLGCLPI VRQEYKTGNE CYELLNDLAK
QHNGKIGPML NEFAKISTSP YGFQFTVDF YNAVLRRRIAT GRSLNYRFFV TNTSCCGVGT HNAYGCGKGN
VHSKLCEYQR SYFFFDGRHN TEKAQEEMAH LLYGADPDVV QPMTVRELIV YPTGETMREY WEPNNLAIRR
RPSRDFYLGL AAYY

Sequence Positions

29-392, 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

44,060 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

GDSL esterase/lipase

NCBI Accession

NP_188037.1

NCBI GI

15231805

NCBI GenBank Nucleotide

NM_112278.3

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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

NCBI GeneID

820639

NCBI Official Full Name

GDSL-like lipase/acylhydrolase superfamily protein

NCBI Official Symbol

ESM1

NCBI Official Synonym Symbols

epithiospecifier modifier 1

NCBI Protein Information

GDSL-like lipase/acylhydrolase superfamily protein

NCBI Summary

A semidominant QTL which has an epistatic effect on the Epithiospecifier gene. Represses nitrile formation and favors isothiocyanate production during glucosinolate hydrolysis. The functional allele deters the insect herbivory T. ni.

UniProt Gene Name

ESM1

UniProt Synonym Gene Names

AtESM1

UniProt Protein Name

GDSL esterase/lipase ESM1

UniProt Synonym Protein Names

Extracellular lipase ESM1; Protein EPITHIOSPECIFIER MODIFIER 1; AtESM1

UniProt Primary Accession

Q9LJG3

UniProt Secondary Accession

Q941A3; A0MAV7

UniProt Related Accession

Q9LJG3

UniProt Comments

Represses or inhibits nitriles production from methionine-derived and from indol-3-ylmethyl glucosinolates. Favors isothiocyanate production.

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