

Insulin-Degrading Enzyme Recombinant Protein | IDE recombinant protein

Recombinant Human Insulin-Degrading Enzyme

CATALOG #
AAA38027HOST
E Coli

PRODUCT SYNONYMS

Insulin-Degrading Enzyme; Recombinant Human Insulin-Degrading Enzyme; IDE Human; Insulin-Degrading Enzyme Human Recombinant; Abeta-Degrading Protease; Insulin Protease; EC 3.4.24.56; Insulinase; INSULYSIN; Insulysin; EC 3.4.24; IDE; IDE recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	IDE filtered (0.4um) solution at a concentration of 0.6mg/ml in 20mM Tris buffer, 50mM NaCl, pH 8.0 and 10% (w/v) glycerol.
Sequence	MRYRLAWLLH PALPSTFRSV LGARLPPPER LCGFQKKTYS KMNNPAIKRI GNHITKSPED KREYRGLELA NGIKVLLISD PTTDKSSAAL DVHIGSLSDP PNIAGLSHFC EHMLFLGTCK YPKENEYSQF LSEHAGSSNA FTSGEHTNYY FDVSEHLEG ALDRFAQFFL CPLFDESCKD REVNAV DSEH EKNVMNDAWR LFQLEKATGN PKHPFSKFGT GNKYTLETRP NQEGIDVRQE LLKFHSAYYS SNLMAVCVLG RESLDDLNL VVKLFSEVEN KNVPLPEFPE HPFQEEHLKQ LYKIVPIKDI RNLYVTFFIP DLQKYKSNP GHYLGHLIGH EGPGSLLSEL KSKGWVNTLV GGQKEGARGF MFFIINVDLT EELLHVEDI ILHMFQYIQK LRAEGPQEWV FQECKDLNAV AFRFKDKERP RGYTSKIAGI LHYYPLEEVL TAEYLLSEFR PDLIEMVLDK LRPENVRVAI VSKSFEGKTD RTEEWYGTQY KQEAIPDEVI KKWQNADLNG KFKLPTKNEF IPTNFEILPL EKEATPYPAL IKDTAMSKLW FKQDDKFFLP KACLNFEFFS PFAYVDPLHC NMAYLELL KDSLNEYAYA AELAGLSYDL QNTIYGMYS VKGYNDKQPI LLKKIEKMA TFEIDEKRFE IIEAYMRS LNNFRAEQPHQ HAMYYLRLLM TEVAWTKDEL KEALDDVTLP RLKAFIPQLL SRLHIEALLH GNITKQAALG IMQMVEDTLI EHAHTKPLLP SQLVRYREVQ LPDRGWFVYQ QRNEVHNCG IEIYYQTDQM STSENMFLEL FCQIIEPCF NTLRTKEQLG YIVFSGPRRA NGIQGLRFII QSEKPPHYLE SRVEAFLITM EKSIEDMTEE AFQKHIQALA IRRLDKPKKL SAECAKYWGE IISQQYNFDR DNTEVAYLKT LTKEDIKIFY KEMLAVDAPR RHKVSVHVLA REMDSCPVG EFPCQNDINL SQAPALPQPE VIQNMTEFKR GLPLFPLVKP HINFMAAKL< u>EHHHHHH< /u>.
Sequence Length	464
Preparation and Storage	Store at 4 degree C if entire vial will be used within 2-4 weeks. Store, frozen at -20 degree C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for IDE recombinant protein

Introduction: Insulin-Degrading Enzyme (IDE) is a zinc metallopeptidase which degrades intracellular insulin, and thus terminates insulins activity, as well as playing a part in intercellular peptide signaling by degrading various peptides such as glucagon, amylin, bradykinin, and kallidin. The preferential affinity of the IDE enzyme for insulin results in insulin-mediated inhibition of the degradation of additional peptides such as beta-amyloid. Deficiencies in IDE protein's function are linked with Alzheimer's disease and type 2 diabetes mellitus nevertheless mutations in the IDE gene have not been demonstrated to be causative for these diseases. Insulin-Degrading Enzyme localizes mainly to the cytoplasm however in some cell types it localizes to the extracellular space, cell membrane, peroxisome, and mitochondrion. In addition, IDE degrades amyloid formed by APP and IAPP. Furthermore, IDE plays a part in the degradation and clearance of naturally secreted amyloid beta-protein by neurons and microglia.

Description: IDE Human Recombinant produced in E Coli is a single, non-glycosylated, polypeptide chain (Met1-Leu1019) containing 1026 amino acids including a 7 aa His tag at C-terminus. The total calculated molecular mass is 119kDa.

NCBI AND UNIPROT INFORMATION

NCBI GI #	260099676
NCBI GeneID	3416
NCBI Accession #	NP_001159418.1
NCBI GenBank Nucleotide #	NM_001165946.1
UniProt Accession #	P14735; Q5T5N2; B2R721; B7ZAU2; D3DR35
NCBI Official Full Name	insulin-degrading enzyme isoform 2
NCBI Official Synonym Full Names	insulin degrading enzyme
NCBI Official Symbol	IDE
NCBI Official Synonym Symbols	INSULYSIN
NCBI Protein Information	insulin-degrading enzyme
UniProt Protein Name	Insulin-degrading enzyme
UniProt Gene Name	IDE
UniProt Synonym Gene Names	Insulinase
UniProt Entry Name	IDE_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.