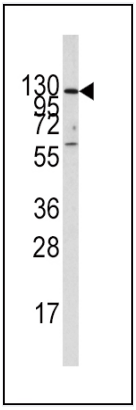
IDE Antibody – Rabbit Polyclonal

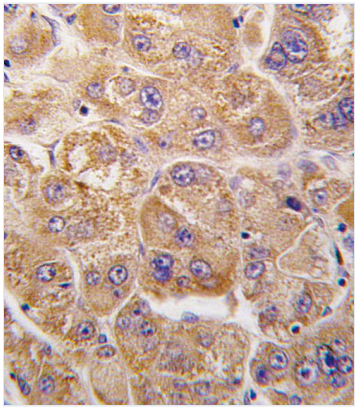
PRODUCT OVERVIEW

Product Name	IDE, Polyclonal Antibody
Full Product Name	IDE Antibody (Center)
Product Gene Name	anti-IDE antibody
Product Synonym Names	Insulin-degrading enzyme; Abeta-degrading protease; Insulin protease; Insulinase; Insulysin; IDE
Clonality	Polyclonal
Isotype	Rabbit Ig
Host	Rabbit
Species Reactivity	Human (Predicted Reactivity: Bovine, Mouse, Rat)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Concentration	Vial Concentration: 2 (lot specific)
Specificity	This IDE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 406-435 amino acids from the Central region of human IDE.
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.
Antibody/Peptide Pairs	IDE peptide (MBS9228553) is used for blocking the activity of IDE antibody (MBS9212110)
Molecular Weight	117968
Immunogen Sequence Positions	406-435
OMIM	146680
3D Structure	ModBase 3D Structure for P14735
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Product Categories/Family for anti-IDE antibody	Cardiovascular; Cell Biology; Metabolism; Signal Transduction
Applications Tested/Suitable for anti-IDE antibody	Western Blot (WB), ELISA (EIA), Immunohistochemistry (IHC)
Application Notes for anti-IDE antibody	WB~~1:1000
Related Product Information for anti-IDE antibody	IDE belongs to a protease family responsible for intercellular peptide signalling. Though its role in the cellular processing of insulin has not yet been defined, insulin-degrading enzyme is thought to be involved in the termination of the insulin response.
Product References and Citations for anti-IDE antibody	Vepsalainen,S.,J. Med. Genet. 44 (9), 606-608 (2007) Kim,M.,J. Biol. Chem. 282 (11), 7825-7832 (2007) Radulescu,R.T.,Int. J. Oncol. 30 (1), 73-80 (2007) Li,Q.,Cell 127 (2), 305-316 (2006)

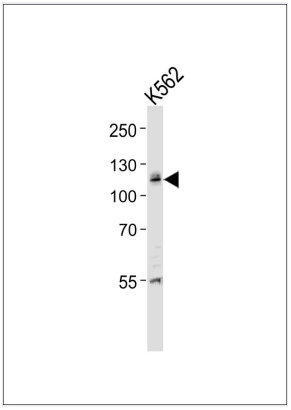
Other Notes	Small volumes of anti-IDE antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for IDE purchase	MBS9212110 is an antibody targeting IDE. Also known as IDE Antibody (Center). Reactive in Human (Predicted Reactivity: Bovine, Mouse, Rat). Host: Rabbit.



Western Blot (WB) of anti-IDE antibody
Western blot analysis of anti-IDE Antibody (Center) in A375 cell line lysates (35ug/lane). IDE (arrow) was detected using the purified Pab.



Immunohistochemistry (IHC) of anti-IDE antibody
Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with IDE antibody (Center) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Western Blot (WB) of anti-IDE antibody
Western blot analysis of lysate from K562 cell line, using IDE Antibody (Center). MBS9212110 was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for IDE. It may not necessarily be applicable to this product.

NCBI GI #	260099676
NCBI GeneID	3416
NCBI Accession #	NP_001159418.1
NCBI Related Accession #	NP_004960.2
UniProt Primary Accession #	P14735
UniProt Secondary Accession #	Q5T5N2; B2R721; B7ZAU2; D3DR35
UniProt Related Accession #	P14735
GenBank Nucleotide #	NM_001165946.1

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
UniProt Protein Name	Insulin-degrading enzyme
UniProt Synonym Protein Names	Abeta-degrading protease; Insulin protease; Insulinase; Insulysin
Protein Family	IgM protease
UniProt Gene Name	IDE
UniProt Synonym Gene Names	Insulinase
UniProt Entry Name	IDE_HUMAN
NCBI Protein Information	insulin-degrading enzyme
NCBI Summary for IDE	This gene encodes a zinc metallopeptidase that degrades intracellular insulin, and thereby terminates insulins activity, as well as participating in intercellular peptide signalling by degrading diverse peptides such as glucagon, amylin, bradykinin, and kallidin. The preferential affinity of this enzyme for insulin results in insulin-mediated inhibition of the degradation of other peptides such as beta-amyloid. Deficiencies in this protein's function are associated with Alzheimer's disease and type 2 diabetes mellitus but mutations in this gene have not been shown to be causitive for these diseases. This protein localizes primarily to the cytoplasm but in some cell types localizes to the extracellular space, cell membrane, peroxisome, and mitochondrion. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional transcript variants have been described but have not been experimentally verified.[provided by RefSeq, Sep 2009]
UniProt Comments for IDE	IDE: Plays a role in the cellular breakdown of insulin, IAPP, glucagon, bradykinin, kallidin and other peptides, and thereby plays a role in intercellular peptide signaling. Degrades amyloid formed by APP and IAPP. May play a role in the degradation and clearance of naturally secreted amyloid beta-protein by neurons and microglia. Belongs to the peptidase M16 family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Protease; EC 3.4.24.56; Cell surface; Nuclear receptor co-regulator Chromosomal Location of Human Ortholog: 10q23-q25 Cellular Component: nucleoplasm; peroxisomal matrix; extracellular space; cell surface; mitochondrion; cytoplasm; plasma membrane; peroxisome; nucleus; cytosol Molecular Function: ubiquitin binding; protein homodimerization activity; zinc ion binding; metalloendopeptidase activity; beta-amyloid binding; ATPase activity; peptide binding; beta-endorphin binding; insulin binding; protein binding; glycoprotein binding; ATP binding; receptor binding Biological Process: negative regulation of proteolysis; positive regulation of protein oligomerization; viral reproduction; proteolysis involved in cellular protein catabolic process; protein heterooligomerization; beta-amyloid metabolic process; insulin receptor signaling pathway; hormone catabolic process; determination of adult life span; proteolysis; protein homooligomerization; protein homotetramerization
Research Articles on IDE	**1.** IDE does not play a major role in MHC class I antigen processing, confirming the dominant and almost exclusive role of the proteasome in cytosolic production of MHC class I ligands.
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