

Anti-IDE Antibody
Mouse monoclonal antibody to IDE
Catalog # AP61591

Specification

Anti-IDE Antibody - Product Information

Application	WB
Primary Accession	P14735
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	117968

Anti-IDE Antibody - Additional Information

Gene ID 3416

Other Names

Insulin-degrading enzyme; Abeta-degrading protease; Insulin protease; Insulinase; Insulysin

Target/Specificity

Recognizes endogenous levels of IDE protein.

Dilution

WB~~WB (1/1000 - 1/2000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-IDE Antibody - Protein Information

Name IDE {ECO:0000303|PubMed:20364150, ECO:0000312|HGNC:HGNC:5381}

Function

Plays a role in the cellular breakdown of insulin, APP peptides, IAPP peptides, natriuretic peptides, glucagon, bradykinin, kallidin, and other peptides, and thereby plays a role in intercellular peptide signaling (PubMed: 10684867, PubMed: 17051221, PubMed: 17613531, PubMed: 18986166, PubMed: 19321446, PubMed: 21098034, PubMed: 2293021, PubMed: 23922390

target="_blank">23922390, PubMed:24847884, PubMed:26394692, PubMed:26968463, PubMed:29596046). Substrate binding induces important conformation changes, making it possible to bind and degrade larger substrates, such as insulin (PubMed:23922390, PubMed:26394692, PubMed:29596046). Contributes to the regulation of peptide hormone signaling cascades and regulation of blood glucose homeostasis via its role in the degradation of insulin, glucagon and IAPP (By similarity). Plays a role in the degradation and clearance of APP-derived amyloidogenic peptides that are secreted by neurons and microglia (Probable) (PubMed:26394692, PubMed:9830016). Degrades the natriuretic peptides ANP, BNP and CNP, inactivating their ability to raise intracellular cGMP (PubMed:21098034). Also degrades an aberrant frameshifted 40-residue form of NPPA (fsNPPA) which is associated with familial atrial fibrillation in heterozygous patients (PubMed:21098034). Involved in antigen processing. Produces both the N terminus and the C terminus of MAGEA3-derived antigenic peptide (EVDPIGHLY) that is presented to cytotoxic T lymphocytes by MHC class I.

Cellular Location

Cytoplasm, cytosol. Cell membrane {ECO:0000250|UniProtKB:P35559}. Secreted Note=Present at the cell surface of neuron cells. The membrane- associated isoform is approximately 5 kDa larger than the known cytosolic isoform

Tissue Location

Detected in brain and in cerebrospinal fluid (at protein level).

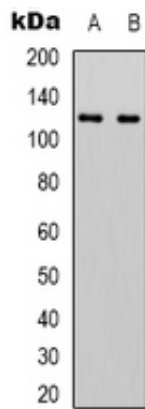
Anti-IDE Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-IDE Antibody - Images





Western blot analysis of IDE expression in HeLa (A), HepG2 (B) whole cell lysates.

Anti-IDE Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence of human IDE. The exact sequence is proprietary.