

## Goat anti-IDE (long isoform aa10-14)) Antibody

Peptide-affinity purified goat antibody Catalog # AF4467a

## **Product Information**

**Application** WB, Pep-ELISA

Primary Accession P14735

Other Accession NP 004960.2, NP 001159418.1

**Reactivity** Human, Bovine

HostGoatClonalityPolyclonalClone NamesIDECalculated MW117968

## **Additional Information**

**Gene ID** 3416

Other Names IDE; insulin-degrading enzyme; INSULYSIN; Abeta-degrading protease; insulin

protease; insulinase

**Dilution** WB~~1:1000 Pep-ELISA~~N/A

**Format** Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5%

bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and

thawing.

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** Goat anti-IDE (long isoform aa10-14)) Antibody is for research use only and

not for use in diagnostic or therapeutic procedures.

## **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, PubMed:24847884, PubMed:26394692,

PubMed: <u>26968463</u>, PubMed: <u>29596046</u>). 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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.