

**Insulin Degrading Enzyme Rabbit mAb**  
Catalog # AP76553**Specification****Insulin Degrading Enzyme Rabbit mAb - Product Information**

Application	<b>WB, IF</b>
Primary Accession	<a href="#">P14735</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>117968</b>

**Insulin Degrading Enzyme Rabbit mAb - Additional Information****Gene ID** 3416**Other Names**

IDE

**Dilution**

WB~~1/500-1/1000

IF~~1/50-1/200

**Format**

Liquid

**Insulin Degrading Enzyme Rabbit mAb - 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:<a href="http://www.uniprot.org/citations/10684867"

target="\_blank">10684867</a>, PubMed:<a href="http://www.uniprot.org/citations/17051221" target="\_blank">17051221</a>, PubMed:<a href="http://www.uniprot.org/citations/17613531" target="\_blank">17613531</a>, PubMed:<a href="http://www.uniprot.org/citations/18986166" target="\_blank">18986166</a>, PubMed:<a href="http://www.uniprot.org/citations/19321446" target="\_blank">19321446</a>, PubMed:<a href="http://www.uniprot.org/citations/21098034" target="\_blank">21098034</a>, PubMed:<a href="http://www.uniprot.org/citations/2293021" target="\_blank">2293021</a>, PubMed:<a href="http://www.uniprot.org/citations/23922390" target="\_blank">23922390</a>, PubMed:<a href="http://www.uniprot.org/citations/24847884" target="\_blank">24847884</a>, PubMed:<a href="http://www.uniprot.org/citations/26394692" target="\_blank">26394692</a>, PubMed:<a href="http://www.uniprot.org/citations/26968463" target="\_blank">26968463</a>, PubMed:<a href="http://www.uniprot.org/citations/29596046" target="\_blank">29596046</a>). Substrate binding induces important conformation changes, making it possible to bind and degrade larger substrates, such as insulin (PubMed:<a href="http://www.uniprot.org/citations/23922390" target="\_blank">23922390</a>, PubMed:<a

[26394692](http://www.uniprot.org/citations/26394692), PubMed: [29596046](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/26394692), PubMed: [9830016](http://www.uniprot.org/citations/9830016)). Degrades the natriuretic peptides ANP, BNP and CNP, inactivating their ability to raise intracellular cGMP (PubMed: [21098034](http://www.uniprot.org/citations/21098034)). Also degrades an aberrant frameshifted 40-residue form of NPPA (fsNPPA) which is associated with familial atrial fibrillation in heterozygous patients (PubMed: [21098034](http://www.uniprot.org/citations/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).

#### Insulin Degrading Enzyme Rabbit mAb - 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](#)

#### Insulin Degrading Enzyme Rabbit mAb - Images



