

Rabbit IDE Polyclonal Antibody | anti-IDE antibody

Anti-IDE Picoband antibody

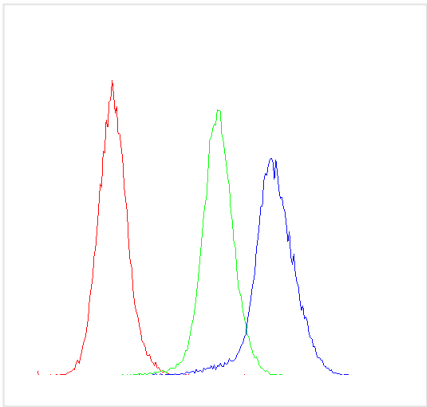
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA124641	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins.	Western Blot, Immunocytochemistry, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

IDE; Polyclonal Antibody; Anti-IDE Picoband antibody; Insulin-degrading enzyme; Abeta-degrading protease; Insulin protease; Insulinase; Insulysin; anti-IDE antibody

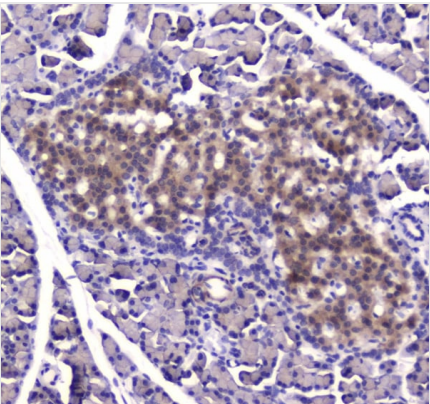
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Form/Format	Lyophilized
Sequence Length	464
Applicable Applications for anti-IDE antibody	WB (Western Blot), ICC (Immunocytochemistry), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA
Immunogen	E Coli-derived human IDE recombinant protein (Position: F485-K756).
Subcellular Localization	Cytoplasm. Cell membrane. Secreted. Present at the cell surface of neuron cells. The membrane-associated isoform is approximately 5 kDa larger than the known cytosolic isoform.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



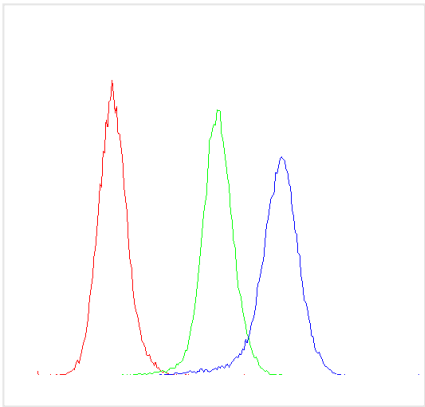
FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of CACO-2 cells using anti-IDE antibody (AAA124641).Overlay histogram showing CACO-2 cells stained with AAA124641 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-IDE Antibody (AAA124641,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



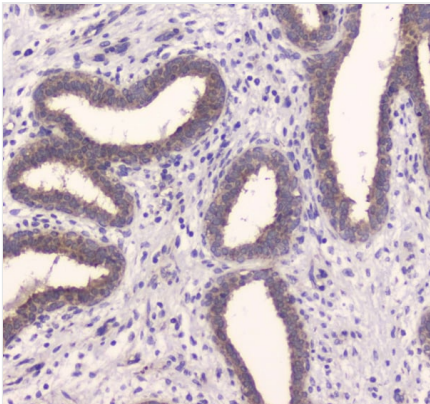
IHC (Immunohistochemisry)

Figure 3. IHC analysis of IDE using anti-IDE antibody (AAA124641).IDE was detected in paraffin-embedded section of rat pancreas tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IDE Antibody (AAA124641) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



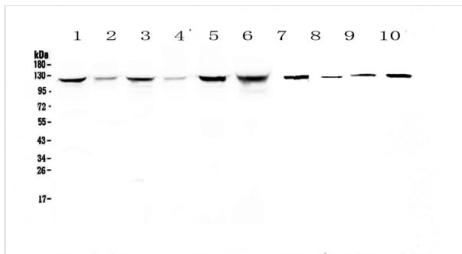
FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of Hela cells using anti-IDE antibody (AAA124641).Overlay histogram showing Hela cells stained with AAA124641 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-IDE Antibody (AAA124641,1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of IDE using anti-IDE antibody (AAA124641).IDE was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IDE Antibody (AAA124641) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of IDE using anti-IDE antibody (AAA124641). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human placenta tissue lysates, Lane 3: human COLO-320 whole cell lysates, Lane 4: human HepG2 whole cell lysates, Lane 5: human SGC-7901 whole cell lysates, Lane 6: human Jurkat whole cell lysates, Lane 7: rat stomach tissue lysates, Lane 8: mouse skeletal muscle tissue lysates, Lane 9: mouse stomach tissue lysates, Lane 10: mouse brain tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-IDE antigen affinity purified polyclonal antibody at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for IDE at approximately 118KD. The expected band size for IDE is at 118KD.

ADDITIONAL INFORMATION

Related Product Information for anti-IDE antibody	Description: Insulin-degrading enzyme, also known as IDE, is an enzyme. 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 causative 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. Protein Function: 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.
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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
Molecular Weight	54,240 Da
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

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/ide-antibody-western-blot-immunocytochemistry-immunohistochemistry-flow-cytometry-elisa/124641>