# IDE Monoclonal Antibody(3H4)

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| **Catalog No** | BYab-00628 |
| **Isotype** | IgG |
| **Reactivity** | Human;Hamster |
| **Applications** | WB;IHC;IF; |
| **Gene Name** | IDE |
| **Protein Name** | Insulin-degrading enzyme |
| **Immunogen** | Synthetic Peptide of IDE |
| **Specificity** | The antibody detects endogenous IDE proteins. |
| **Formulation** | PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol. |
| **Source** | Monoclonal, Mouse |
| **Purification** | The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen. |
| **Dilution** | WB: 1:1000 IF 1:200 IHC 1:50-300 |
| **Concentration** | 1 mg/ml |
| **Purity** | ≥90% |
| **Storage Stability** | -20°C/1 year |
| **Synonyms** | IDE; Insulin-degrading enzyme; Abeta-degrading protease; Insulin protease; Insulinase; Insulysin |
| **Observed Band** | 118kD |
| **Cell Pathway** | Cytoplasm, cytosol . 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. |
| **Tissue Specificity** | Detected in brain and in cerebrospinal fluid (at protein level). |
| **Function** | catalytic activity:Degradation of insulin, glucagon and other polypeptides. No action on proteins.,cofactor:Binds 1 zinc ion per subunit.,function:May play a role in the cellular processing of insulin. May be involved in intercellular peptide signaling.,PTM:The N-terminus is blocked.,similarity:Belongs to the peptidase M16 family.,subunit:Homodimer., |
| **Background** | 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, |

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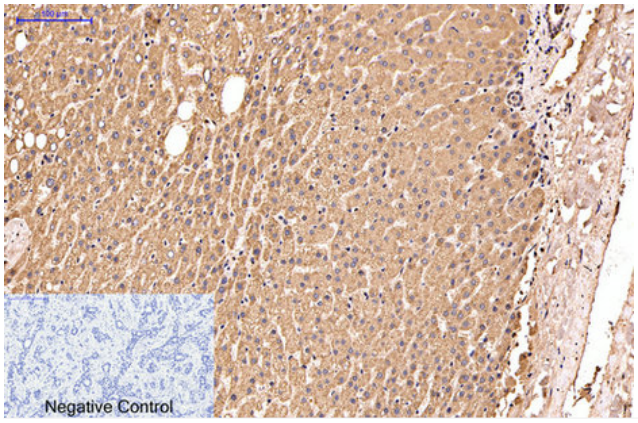
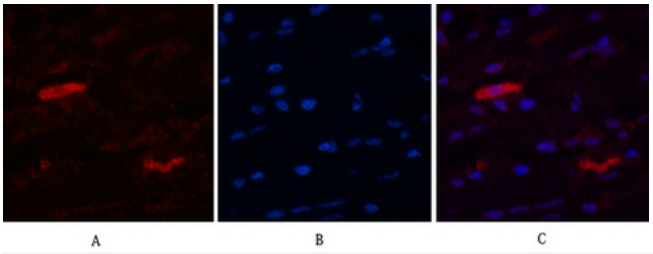
| | bradykinin, and kallidin. The preferential affinity of this enzyme for insulin results in insulin-mediated inhibition of the degradation of other peptides such as beta-amyloid. Deficiencies in this protein's function are associated with Alzheimer's disease and type 2 diabetes mellitus but mutations 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 describe |
| **matters needing attention** | Avoid repeated freezing and thawing! |
| **Usage suggestions** | This product can be used in immunological reaction related experiments. For more information, please consult technical personnel. |

## Products Images




Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,IDE Monoclonal Antibody(3H4) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.




Immunofluorescence analysis of Human-breast tissue. 1,IDE Monoclonal Antibody(3H4)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

Western blot analysis of 1) Hela, 2) HepG2, diluted at 1:2000