

Summary

Production Name	IDE(3H4)Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	IHC,IF,WB
Reactivity	Human,Hamster

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	PBS, pH 7.4, containing 0.5%BSA, 0.02% New type preservative N as Preservative and
	50% Glycerol.
Purification	Affinity purification

Immunogen

Gene Name	IDE
Alternative Names	IDE; Insulin-degrading enzyme; Abeta-degrading protease; Insulin protease; Insulinase;
	Insulysin
Gene ID	3416.0
SwissProt ID	P14735.Synthetic Peptide of IDE

Application

Dilution Ratio	WB 1:1000 IF 1:200 IHC 1:50-300
Molecular Weight	118kD



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, 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 describecatalytic 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.,

Research Area

Alzheimer's disease;

Image Data



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

Note

For research use only.