Product Name: KD-Validated IDE Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01044
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 118.0kDa

Antigen Information

Gene Name	IDE
Alternative Names	IDE; Insulin Degrading Enzyme; Insulin-Degrading Enzyme; Antibodyeta-Degrading Protease; Insulin Protease; EC 3.4.24.56; Insulinase; Insulysin; INSULYSIN; EC 3.4.24
Gene ID	3416.0
SwissProt ID	P14735
Immunogen	A synthesized peptide derived from human IDE

Background

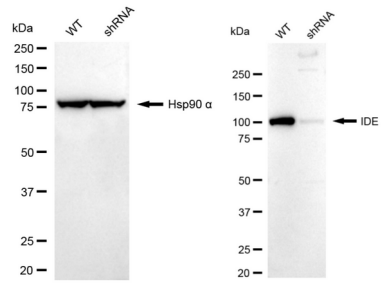
This gene encodes a zinc metallopeptidase that degrades intracellular insulin, and thereby terminates insulins activity, as well as participating in intercellular peptide signalling by degrading diverse peptides such as glucagon, amylin, bradykinin, and kallidin. The preferential affinity of this enzyme 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 described but have not been experimentally verified.[provided by RefSeq, Sep 2009]

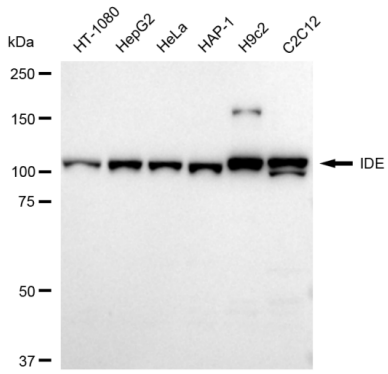
Research Area

Neuroscience,Signal Transduction,Cell Biology,Cardiovascular,Metabolism

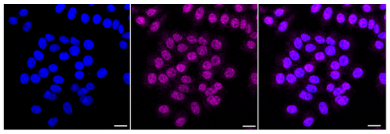
Image Data



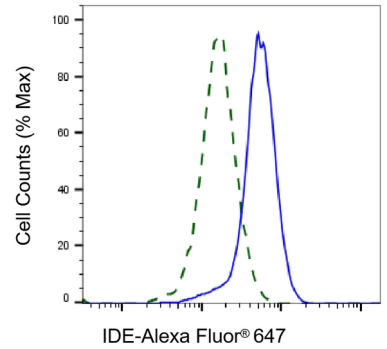
Western blotting analysis using IDE antibody (KVAb01044). IDE expression in wild type (WT) and IDE shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with IDE antibody (KVAb01044, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



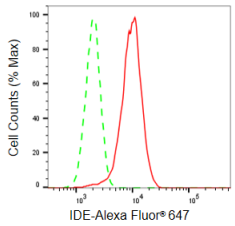
Western blotting analysis using IDE antibody (KVAb01044). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with IDE antibody (KVAb01044, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with IDE antibody (KVAb01044, 1:1,000) . Nuclei were stained blue with DAPI; IDE was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Validation of IDE knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with IDE antibody (KVAb01044, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of IDE expression in HepG2 cells using IDE antibody (KVAb01044, 1:2,000). Green, isotype control; red, IDE.