abcam

Product datasheet

Anti-Insulin degrading enzyme / IDE antibody ab32216

KO VALIDATED

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Overview

Product name	Anti-Insulin degrading enzyme / IDE antibody
Description	Rabbit polyclonal to Insulin degrading enzyme / IDE
Host species	Rabbit
Specificity	Replenishment batches of our polyclonal antibody, ab32216 are tested in WB. Previous batches were additionally validated in IHC-FoFr. This application is still expected to work and is covered by our Abpromise guarantee. You may also be interested in our alternative recombinant antibody, **ab133561**.
Tested applications	**Suitable for:** WB, IHC-FoFr
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Cow, Cat, Dog
Immunogen	Synthetic peptide corresponding to Human Insulin degrading enzyme/ IDE aa 950 to the C-terminus. (Peptide available as **ab32215**)
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

	Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab32216 in the following tested applications.

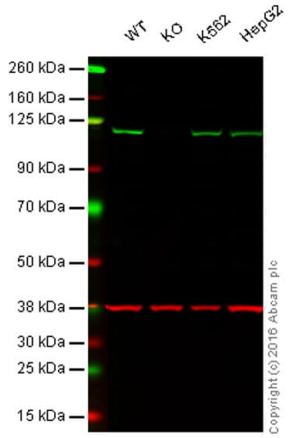
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★☆☆ (2)	Use a concentration of 1 µg/ml. Detects a band of approximately 118 kDa (predicted molecular weight: 118 kDa).Can be blocked with **Human Insulin degrading enzyme / IDE peptide (ab32215)**.
IHC-FoFr	★★★★★ (2)	1/100.

Target

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.
Sequence similarities	Belongs to the peptidase M16 family.
Post-translational modifications	The N-terminus is blocked.
Cellular localization	Cytoplasm. Cell surface. Present at the cell surface of neuron cells. The membrane-associated isoform is approximately 5 kDa larger than the known cytosolic isoform.

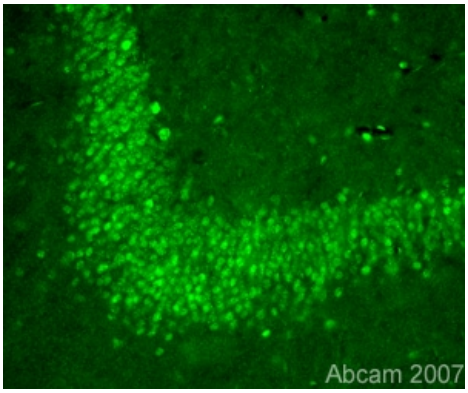
Images



Western blot - Anti-Insulin degrading enzyme / IDE antibody (ab32216)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: Insulin degrading enzyme / IDE knockout HAP1 cell lysate (20 µg)
Lane 3: K562 cell lysate (20 µg)
Lane 4: HepG2 cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab32216 observed at 120 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

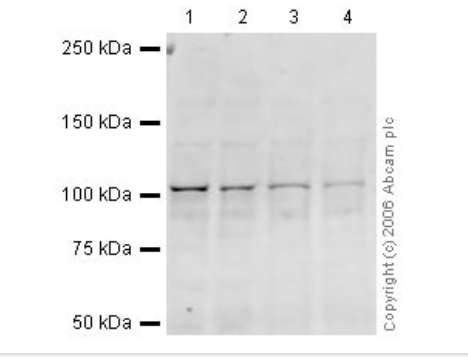
ab32216 was shown to specifically react with Insulin degrading enzyme / IDE in wild-type HAP1 cells. No band was observed when Insulin degrading enzyme / IDE knockout samples were examined. Wild-type and Insulin degrading enzyme / IDE knockout samples were subjected to SDS-PAGE. ab32216 and **ab8245** (loading control to GAPDH) were diluted at 1µg/ml and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-Insulin degrading enzyme / IDE antibody (ab32216)

This image is courtesy of Sophie Pezet, CNRS, Paris, France

Immunofluorescent staining for Insulin degrading enzyme/IDE in rat brain rat hippocampus using Rabbit polyclonal to Insulin degrading enzyme/IDE (ab32216). . The staining is located in the neuronal soma and is finely punctuated. The picture was acquired using the X20 objective. Protocol details: Rats were intracardially perfused with 4% paraformaldehyde. Whole brain tissue was post-fixed overnight in the same fixative, and cryoprotected in 20% sucrose and frozen in OCT. 30µm coronal sections were cut by cryostat for use in fre floating IHC. Primary antibody ab32216 was incubated overnight at 1/100 at room temperature. Secondary antibody Alexa fluor 488 1/1000 was incubated for 2 hours at room temperature.



Western blot - Anti-Insulin degrading enzyme / IDE antibody (ab32216)

All lanes : Anti-Insulin degrading enzyme / IDE antibody (ab32216) at 1 µg/ml

Lane 1 : Mouse Brain at 20 µg/ml
Lane 2 : Brain (Rat) Whole Cell Lysate - normal tissue at 20 µg
Lane 3 : Mouse Hippocampus Lysate at 20 µg
Lane 4 : Rat Hippocampus Lysate at 20 µg

Secondary
All lanes : Goat polyclonal to Rabbit IgG (Alexa Fluor® 680) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 118 kDa
Observed band size: 118 kDa

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