# abcam

## Product datasheet

# Anti-Insulin degrading enzyme / IDE antibody [EPR6098(2)] ab133561





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#### Overview

**Product name** Anti-Insulin degrading enzyme / IDE antibody [EPR6098(2)]

**Description** Rabbit monoclonal [EPR6098(2)] to Insulin degrading enzyme / IDE

**Host species** Rabbit

**Tested applications** Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt,ICC/IF or IP

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

**Immunogen** Synthetic peptide within Human Insulin degrading enzyme/ IDE aa 50-150. The exact sequence is

proprietary.

Database link: P14735

Positive control HeLa, HepG2, A375, and K562 cell lysates, Human colon tissue

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

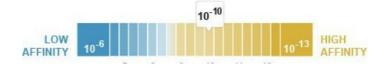
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 2.31 \times 10^{-10} M$ Dissociation constant (K<sub>D</sub>)



### Learn more about K<sub>D</sub>

Storage buffer pH: 7.2

Preservative: 0.05% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture

-11

supernatant

Purity Protein A purified

Clonality Monoclonal
Clone number EPR6098(2)

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab133561 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	**** <u>(3)</u>	1/1000 - 1/10000. Detects a band of approximately 120 kDa (predicted molecular weight: 118 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt,ICC/IF or IP.

## **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

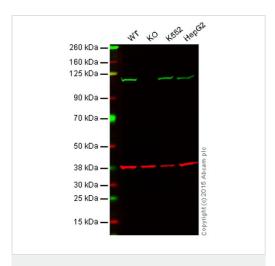
modifications

The N-terminus is blocked.

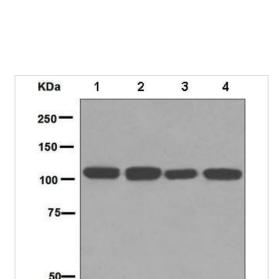
Cytoplasm. Cell surface. Present at the cell surface of neuron cells. The membrane-associated

isoform is approximately 5 kDa larger than the known cytosolic isoform.

### **Images**



Western blot - Anti-Insulin degrading enzyme / IDE antibody [EPR6098(2)] (ab133561)



Western blot - Anti-Insulin degrading enzyme / IDE antibody [EPR6098(2)] (ab133561)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: 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 - ab133561 observed at 120 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab133561 was shown to specifically react with IDE in wild-type HAP1 cells. No band was observed when IDE knockout samples were examined. Wild-type and IDE knockout samples were subjected to SDS-PAGE. ab133561 and <a href="mailto:ab8245">ab8245</a> (loading control to GAPDH) were diluted 1/1000 and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.

**All lanes :** Anti-Insulin degrading enzyme / IDE antibody [EPR6098(2)] (ab133561) at 1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : HepG2 cell lysate

Lane 3: A375 cell lysate

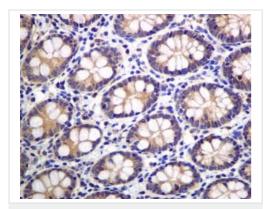
Lane 4: K562 cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

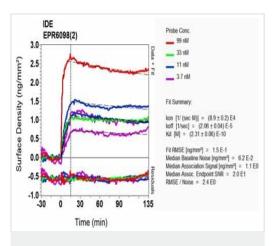
**Predicted band size:** 118 kDa **Observed band size:** 120 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Insulin degrading enzyme / IDE antibody [EPR6098(2)] (ab133561)

Immunohistochemical analysis of paraffin embedded Human colon tissue labelling Insulin degrading enzyme / IDE with ab133561 antibody at a dilution of 1/50.

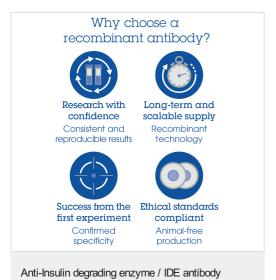
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



OI-RD Scanning - Anti-Insulin degrading enzyme / IDE antibody [EPR6098(2)] (ab133561)

Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

Click here to learn more about K<sub>D</sub>



[EPR6098(2)] (ab133561)

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