




Product datasheet

Anti-Glycine decarboxylase antibody ab204087

5 Images

Overview

Product name	Anti-Glycine decarboxylase antibody
Description	Rabbit polyclonal to Glycine decarboxylase
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Chicken 
Immunogen	Recombinant fragment corresponding to Human Glycine decarboxylase aa 557-692. Sequence: SCTMKLNSSSELAPITWKEFANIHPFVPLDQAQGYQQLFR ELEKDLCELT GYDQVCFQPNSGAQGEYAGLATIRAYLNQKGEGHRTVCLI PKSAHG TNPA SAHMAGMKIQPVEVDKYGNIDAVHLKAMVDKHKENL Database link: P23378  Run BLAST with  Run BLAST with
Positive control	WB: Caco-2 and HeLa whole cell lysate; IHC-P: Human kidney, placenta and liver tissue; ICC: HepG2 whole cells.
General notes	Previously labelled as GLDC. Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough. Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility. We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee. In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for. We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee. Applications & species from publications and Abreviews that have not been tested in our own

labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as 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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.02% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

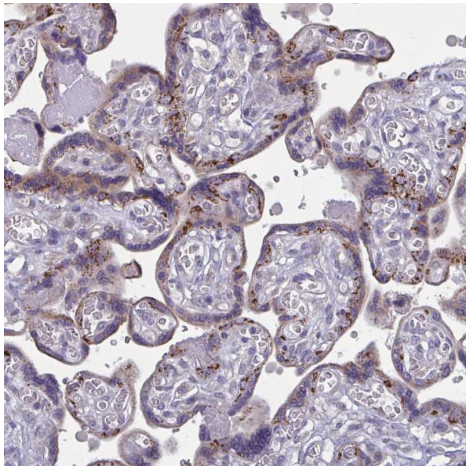
Our [Abpromise guarantee](#) covers the use of **ab204087** in the following tested applications.

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

Application	Abreviews	Notes
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100
WB		Use a concentration of 0.04 - 0.4 µg/ml. Predicted molecular weight: 113 kDa.
IHC-P		1/1000 - 1/2500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

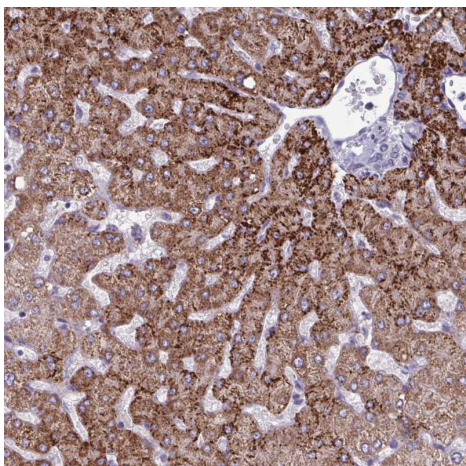
Function	The glycine cleavage system catalyzes the degradation of glycine. The P protein binds the alpha-amino group of glycine through its pyridoxal phosphate cofactor; CO(2) is released and the remaining methylamine moiety is then transferred to the lipoamide cofactor of the H protein.
Involvement in disease	Defects in GLDC are a cause of non-ketotic hyperglycinemia (NKH) [MIM:605899]; also known as glycine encephalopathy (GCE). NKH is an autosomal recessive disease characterized by accumulation of a large amount of glycine in body fluid and by severe neurological symptoms.
Sequence similarities	Belongs to the gcvP family.
Cellular localization	Mitochondrion.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glycine decarboxylase antibody (ab204087)

Immunohistochemical analysis of paraffin-embedded human placenta tissue labeling Glycine decarboxylase (high expression) with ab204087 at a 1/1000 dilution.

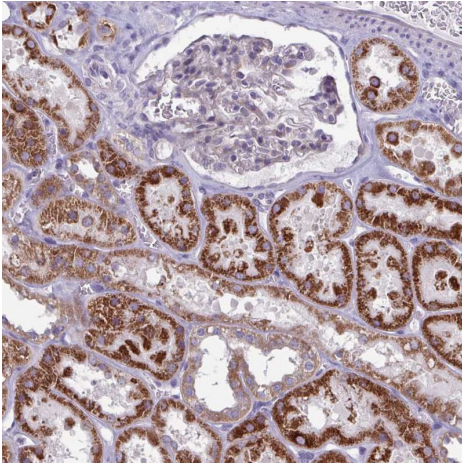
Performed heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glycine decarboxylase antibody (ab204087)

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling Glycine decarboxylase (high expression) with ab204087 at a 1/1000 dilution.

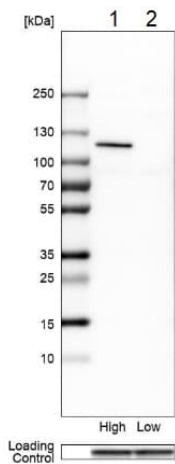
Performed heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glycine decarboxylase antibody (ab204087)

Immunohistochemical analysis of paraffin-embedded human kidney tissue labeling Glycine decarboxylase (high expression) with ab204087 at a 1/1000 dilution.

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



Western blot - Anti-Glycine decarboxylase antibody (ab204087)

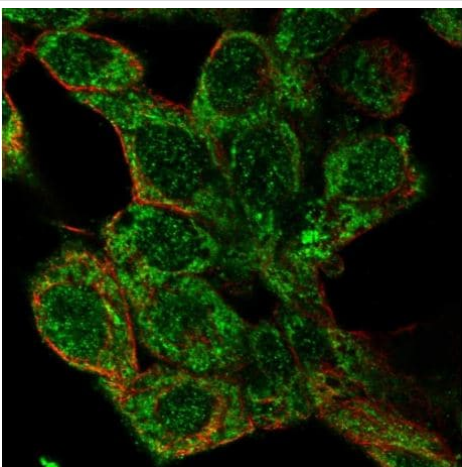
All lanes : Anti-Glycine decarboxylase antibody (ab204087) at 0.4 µg/ml

Lane 1 : Caco-2 (Human colorectal adenocarcinoma cell line) whole cell lysate

Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Predicted band size: 113 kDa

Loading control: Anti-GAPDH.



Immunocytochemistry/ Immunofluorescence - Anti-Glycine decarboxylase antibody (ab204087)

Immunocytochemical analysis of HepG2 (Human liver hepatocellular carcinoma cell line) whole cells labeling Glycine decarboxylase in the nucleus and mitochondria with ab204087 at 2 µg/ml.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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