

Product datasheet

Anti-Glutaminase antibody ab93434

★★★★☆ 4 Abreviews 48 References 8 Images

Overview

Product name	Anti-Glutaminase antibody
Description	Rabbit polyclonal to Glutaminase
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt, WB, ICC/IF, IHC-Fr, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Human Glutaminase aa 516-545 (C terminal) conjugated to Keyhole Limpet Haemocyanin (KLH).
Positive control	WB: 293, 239T and HeLa whole cell lysate (ab150035), mouse liver and brain tissue lysates, human brain and rat kidney tissue lysates. ICC/IF: HeLa and HepG2 cells. IHC-P: Human liver and mouse brain tissues. Flow Cyt: HepG2 cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at 4°C (up to 6 months). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.09% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Purification notes	This antibody is purified through a protein A column, followed by peptide affinity purification.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab93434 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

Application	Abreviews	Notes
Flow Cyt		1/10 - 1/50. ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (2)	1/1000. Predicted molecular weight: 65 kDa.
ICC/IF		Use a concentration of 5 µg/ml.
IHC-Fr	★★★★★ (1)	Use at an assay dependent concentration.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Target

Function

Catalyzes the first reaction in the primary pathway for the renal catabolism of glutamine.

Tissue specificity

KGA is expressed predominantly in brain and kidney but not in liver, isoform 3 is expressed principally in cardiac muscle and pancreas but not in liver or brain, and isoform 2 is expressed solely in cardiac and skeletal muscle.

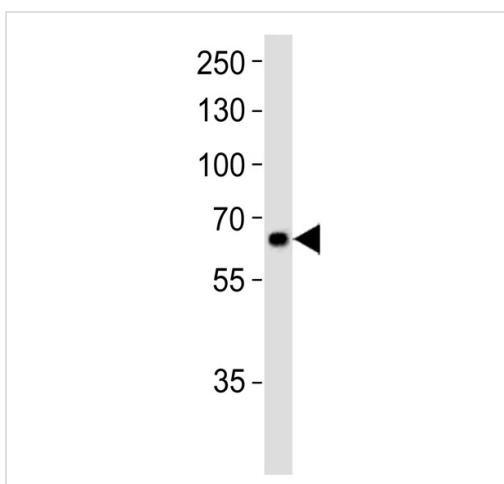
Sequence similarities

Belongs to the glutaminase family.
Contains 1 ANK repeat.

Cellular localization

Mitochondrion.

Images



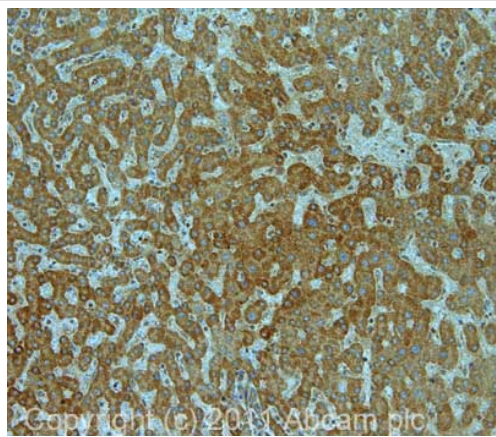
Western blot - Anti-Glutaminase antibody (ab93434)

Anti-Glutaminase antibody (ab93434) at 1/1000 dilution + Rat kidney tissue lysate at 35 µg

Secondary

HRP-conjugated goat anti-rabbit IgG (H+L) at 1/5000 dilution

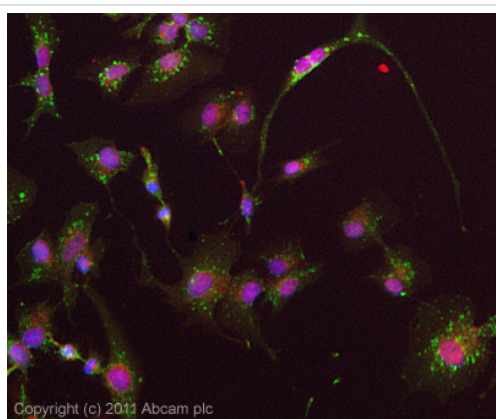
Predicted band size: 65 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutaminase antibody (ab93434)

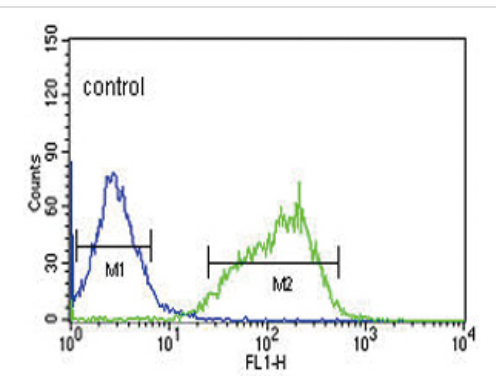
IHC image of ab93434 staining in human liver formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab93434, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



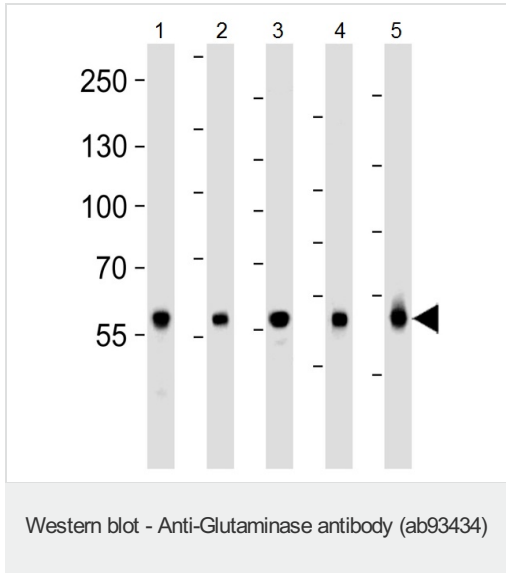
Immunocytochemistry/ Immunofluorescence - Anti-Glutaminase antibody (ab93434)

ICC/IF image of ab93434 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab93434, 5µg/ml) overnight at +4°C. The secondary antibody (green) was ab96899, DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Flow Cytometry - Anti-Glutaminase antibody (ab93434)

Flow cytometry analysis of HepG2 cells labelling Glutaminase (green) with ab93434 compared to a negative control (blue). A FITC-conjugated goat anti-rabbit IgG was used as the secondary antibody.



All lanes : Anti-Glutaminase antibody (ab93434) at 1/1000 dilution

Lane 1 : 293 cell lysate

Lane 2 : 293T cell lysate

Lane 3 : HeLa cell lysate

Lane 4 : Human brain tissue lysate

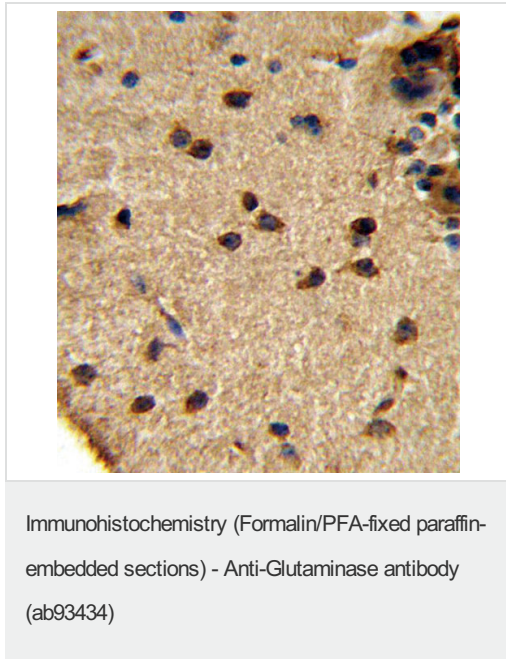
Lane 5 : Mouse brain tissue lysate

Lysates/proteins at 35 µg per lane.

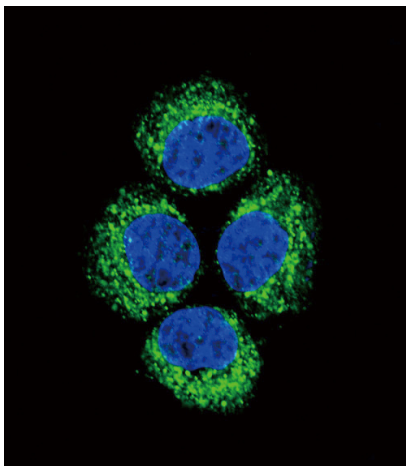
Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG (H+L) at 1/5000 dilution

Predicted band size: 65 kDa

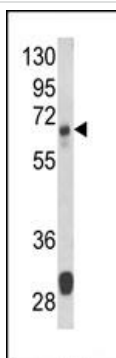


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse brain tissue labelling Glutaminase with ab93434. A peroxidase-conjugated anti-rabbit IgG was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Glutaminase antibody (ab93434)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling Glutaminase (green) with ab93434. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG was used as the secondary antibody. Counter stained with DAPI (blue).



Western blot - Anti-Glutaminase antibody (ab93434)

Anti-Glutaminase antibody (ab93434) at 1/1000 dilution + mouse liver tissue lysate at 35 µg

Secondary

Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/5000 dilution

Predicted band size: 65 kDa

Incubation time was overnight at 4°C. Blocking/Dilution buffer: 5% NFDm/TBST.

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