## 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**  

## 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

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.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
</table>
**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.

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**Images**

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 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 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).

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.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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