

# Anti-Glutamine antibody ab9445

## 4 References

### Overview

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<b>Product name</b>	Anti-Glutamine antibody
<b>Description</b>	Rabbit polyclonal to Glutamine
<b>Host species</b>	Rabbit
<b>Specificity</b>	The antibody is calibrated against a spectrum of antigens to assure hapten selectivity. No measurable cross-reactivity (<1:1000) was detected against glutamine in peptides or proteins. Fixed tissue cross-reactivity was tested with known targets at the recommended dilution. No measurable glutaraldehyde-fixed tissue cross-reactivity (<1:1000) was detected against L-alanine, gamma-aminobutyrate, agmatine, guanidine, D/L-arginine, L-citrulline, L-cysteine, D/L-glutamate, glutathione, glycine, L-lysine, L-ornithine, L-serine, taurine, L-threonine, L-tryptophan, L-tyrosine.
<b>Tested applications</b>	<b>Suitable for:</b> IHC-FoFr, IHC-Fr, ICC, Immunomicroscopy
<b>Species reactivity</b>	<b>Reacts with:</b> Species independent
<b>Immunogen</b>	Chemical/ Small Molecule corresponding to Glutamine. Glutathione conjugated to glutaraldehyde
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Purity</b>	IgG fraction
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab9445 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
IHC-FoFr		
IHC-Fr		
ICC		
Immunomicroscopy		

### Application notes

This antibody is recommended for thin section post-embedding endogenous content mapping by Light and Electron microscopy immunostaining via High Performance Immunocytochemistry (HPI) (see "Protocols" tab above)

Recommended user dilution: 1/100  
True Dilution at User Dilution: 1/2000

High-performance thin section immunostaining using silver-intensified immunogold or fluorescence detection.

Enhanced detection is possible using streptavidin detection.

EM applications with 10-40 nm gold GAR IgGs or gold streptavidin.

OPTIMAL FIXATION: 0.2-2.5% glutaraldehyde, 1% formaldehyde using HPI protocol (The antisera targets the glutaraldehyde conjugate of the hapten).

MINIMAL GLUTARALDEHYDE: 0.01% using HPI

The hapten is osmium tolerant (deosmication required), therefore the antisera can be used on conventional post-embedding electron microscope immunostaining.

All procedures may be carried out at room temperature. Exact dilutions for all applications cannot be predicted, but it is unlikely that deviations from the calibrated levels will be needed. Dilutions are optimized for antigen detection over a 2 log unit range.

The product is optimized for HPI/EHPI with gold or fluorescence detection using etched plastic sections. Filter diluted reagents with 0.2 mm syringe filters before use on EM grids. Enzyme-linked visualizations can be used but will compress the signal dynamic range and are less sensitive.

Use with frozen or vibratome sections is possible but will not yield optimal images as IgGs penetrate aldehyde cross-linked tissue poorly and most amino acids are present at such high levels that prozone effects occur. Use in whole mounts is not recommended for similar reasons.

## Target

### Relevance

Glutamine (abbreviated as Gln or Q; the abbreviation Glx or Z represents either glutamine or glutamic acid) is one of the 20 amino acids encoded by the standard genetic code. Its side chain is an amide formed by replacing the side-chain hydroxyl of glutamic acid with an amine functional

group. It can therefore be considered the amide of glutamic acid. Its codons are CAA and CAG. Recent studies have proven its effectiveness in anabolic muscle growth from prolonged consumption.

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

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- Extensive multi-media technical resources to help you
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