abcam

Product datasheet

Anti-Glutaredoxin 1 antibody ab45953

★★★★★ 2 Abreviews 20 References 5 Images

Overview

Product name	Anti-Glutaredoxin 1 antibody
Description	Rabbit polyclonal to Glutaredoxin 1
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, IP, ICC/IF, WB
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat, Rabbit, Cow, Pig
Immunogen	Synthetic peptide corresponding to Human Glutaredoxin 1 aa 50 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as **ab45952**)
Positive control	Recombinant Human Glutaredoxin 1 protein (**ab86987**) can be used as a positive control in WB. This antibody gave a positive signal in the following whole cell lysates: HeLa (Human epithelial carcinoma cell line) Jurkat (Human T cell lymphoblast-like cell line)
General notes	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. 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&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 or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab45953 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-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use a concentration of 5 µg/ml.
ICC/IF		Use a concentration of 1 µg/ml.
WB	★★★★★ (2)	1/250. Detects a band of approximately 12 kDa (predicted molecular weight: 12 kDa).

Target

Function	Has a glutathione-disulfide oxidoreductase activity in the presence of NADPH and glutathione reductase. Reduces low molecular weight disulfides and proteins.
Sequence similarities	Belongs to the glutaredoxin family. Contains 1 glutaredoxin domain.
Cellular localization	Cytoplasm.

Images

Western blot - Anti-Glutaredoxin 1 antibody (ab45953)

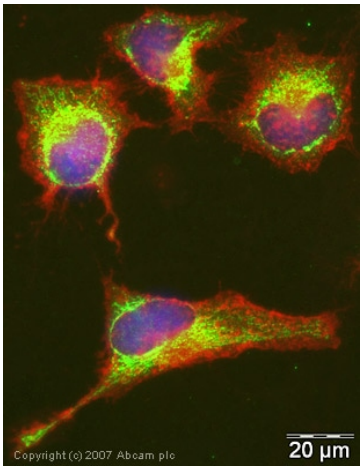
Anti-Glutaredoxin 1 antibody (ab45953) at 1/250 dilution + Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate at 10 µg

Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed at 1/3000 dilution

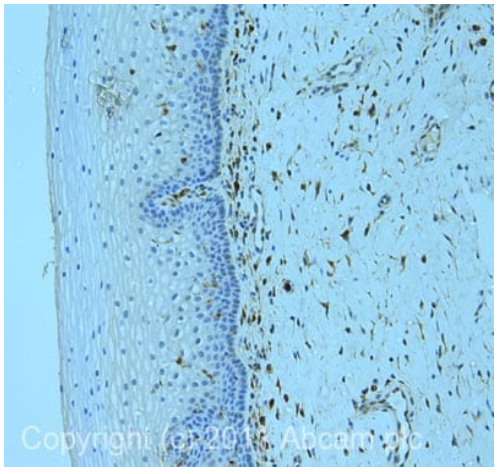
Performed under reducing conditions.

Predicted band size: 12 kDa
Observed band size: 12 kDa
Additional bands at: 45 kDa, 70 kDa. We are unsure as to the identity of these extra bands.



Immunocytochemistry/ Immunofluorescence - Anti-Glutaredoxin 1 antibody (ab45953)

ICC/IF image of ab45953 stained human HeLa cells. The cells were methanol fixed (5 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab45953, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).

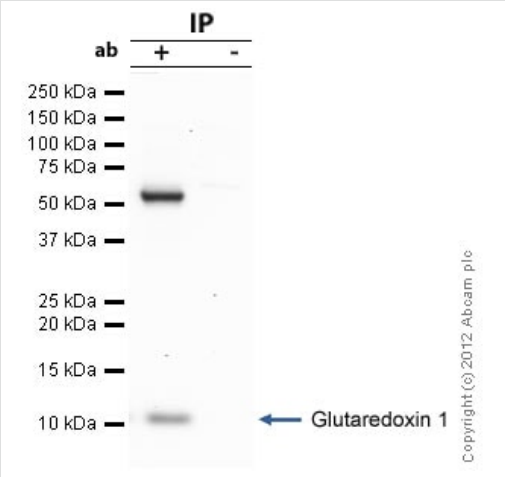


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glutaredoxin 1 antibody (ab45953)

IHC image of ab45953 staining in cervix 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 ab45953, 1µg/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.

Western blot - Anti-Glutaredoxin 1 antibody (ab45953)



Immunoprecipitation - Anti-Glutaredoxin 1 antibody (ab45953)

Glutaredoxin 1 was immunoprecipitated using 0.5mg Jurkat whole cell extract, 5µg of Rabbit polyclonal to Glutaredoxin 1 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).
The antibody was incubated under agitation with Protein G beads for 10min, Jurkat whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.
Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70^{o}C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab45953.
Secondary: Clean-Blot IP Detection Reagent (HRP) at 1/500 dilution.
Band: 12kDa; Glutaredoxin 1.

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