Product datasheet

Anti-Glutathione Peroxidase 4 antibody ab40993

Overview

Product name Anti-Glutathione Peroxidase 4 antibody
Description Rabbit polyclonal to Glutathione Peroxidase 4
Host species Rabbit
Tested applications Suitable for: ICC/IF, WB
Species reactivity Reacts with: Human
Predicted to work with: a wide range of other species
Immunogen Synthetic peptide conjugated to KLH derived from within residues 50 - 150 of Human Glutathione Peroxidase 4. Read Abcam's proprietary immunogen policy (Peptide available as ab41785.)
Positive control ab40993 gave a positive signal in the following human tissue lysates: Brain, Testis, Liver, Heart, Skeletal Muscle, Kidney, Colon, Small Intestine (data not shown).

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 Preservative: 0.02% Sodium Azide
 Constituents: 1% BSA, PBS, pH 7.4
Purity Immunogen affinity purified
Clonality Polyclonal
Isotype IgG

Applications

Our Abpromise guarantee covers the use of ab40993 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>ICC/IF</td>
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<td>Use a concentration of 1 µg/ml.</td>
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<tr>
<td>WB</td>
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<td>Use a concentration of 1 µg/ml. Detects a band of approximately 22 kDa (predicted molecular weight: 22 kDa).</td>
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**Target**

**Function**

Protects cells against membrane lipid peroxidation and cell death. Required for normal sperm development and male fertility. Could play a major role in protecting mammals from the toxicity of ingested lipid hydroperoxides. Essential for embryonic development. Protects from radiation and oxidative damage.

**Tissue specificity**

Present primarily in testis.

**Sequence similarities**

Belongs to the glutathione peroxidase family.

**Cellular localization**

Mitochondrion. Cytoplasm.

**Images**

**All lanes**: Anti-Glutathione Peroxidase 4 antibody (ab40993) at 1 µg/ml

- **Lane 1**: Human brain tissue lysate - total protein (ab29466)
- **Lane 2**: Human testis tissue lysate - total protein (ab30257)
- **Lane 3**: Human liver tissue lysate - total protein (ab29889)
- **Lane 4**: Human heart tissue lysate - total protein (ab29431)
- **Lane 5**: Human skeletal muscle tissue lysate - total protein (ab29330)
- **Lane 6**: Human kidney tissue lysate - total protein (ab30203)
- **Lane 7**: Human colon tissue lysate - total protein (ab30051)

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes**: IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

**Predicted band size**: 22 kDa

**Observed band size**: 22 kDa
ICC/IF image of ab40993 stained human HeLa cells. The cells were PFA fixed (10 min), permeabilised in TBS-T (20 min) and incubated with the antibody (ab40993, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal goat 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).

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