

HRP Anti-TXNRD1 antibody [EPNCIR129] ab203464

Recombinant RabMAb

3 Images

Overview

Product name	HRP Anti-TXNRD1 antibody [EPNCIR129]
Description	HRP Rabbit monoclonal [EPNCIR129] to TXNRD1
Host species	Rabbit
Conjugation	HRP
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant full length protein corresponding to Mouse TXNRD1. Database link: Q9JMH6
Positive control	WB: Mouse liver, human fetal liver and rat liver tissue lysates; NIH 3T3 and RAW264.7 whole cell lysates. IHC-P: FFPE human liver hepatocellular carcinoma tissue sections.
General notes	This antibody was developed as part of a collaboration between Epitomics, the National Cancer Institute's Center for Cancer Research and the lab of Dolph Hatfield. View antibodies from NCI Center for Cancer Research Collaboration. Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.

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. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: PBS, 1% BSA, 30% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPNCIR129
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab203464 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
WB		1/5000. Detects a band of approximately 55 kDa (predicted molecular weight: 55, 67 kDa).
IHC-P		1/125. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Target

Function

Isoform 1 may possess glutaredoxin activity as well as thioredoxin reductase activity and induces actin and tubulin polymerization, leading to formation of cell membrane protrusions. Isoform 4 enhances the transcriptional activity of estrogen receptors alpha and beta while isoform 5 enhances the transcriptional activity of the beta receptor only. Isoform 5 also mediates cell death induced by a combination of interferon-beta and retinoic acid.

Tissue specificity

Isoform 1 is expressed predominantly in Leydig cells (at protein level). Also expressed in ovary, spleen, heart, liver, kidney and pancreas and in a number of cancer cell lines. Isoform 4 is widely expressed with highest levels in kidney, testis, uterus, ovary, prostate, placenta and fetal liver.

Sequence similarities

Belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family.
Contains 1 glutaredoxin domain.

Domain

The N-terminal glutaredoxin domain found in isoform 1 does not contain the C-P-Y-C redox-active motif normally found in glutaredoxins and has been found to be inactive in classical glutaredoxin assays.

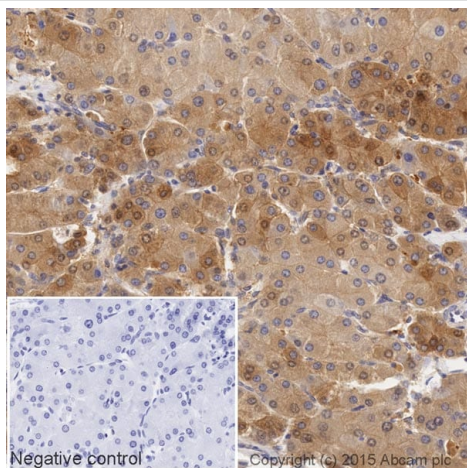
Post-translational modifications

The N-terminus of isoform 5 is blocked.
ISGylated.

Cellular localization

Cytoplasm and Cytoplasm. Nucleus.

Images

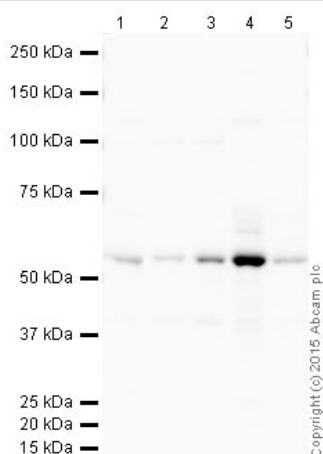


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-TXNRD1 antibody [EPNCIR129] (ab203464)

IHC image of TXNRD1 staining in a section of formalin-fixed paraffin-embedded human liver hepatocellular carcinoma tissue*, performed on a Leica BOND™. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab203464, 1/125 dilution, for 15 mins at room temperature. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

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.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - HRP Anti-TXNRD1 antibody [EPNCIR129] (ab203464)

All lanes : HRP Anti-TXNRD1 antibody [EPNCIR129] (ab203464) at 1/5000 dilution

Lane 1 : Liver (Mouse) Tissue Lysate

Lane 2 : NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lane 3 : RAW 264.7 (Mouse leukaemic monocyte macrophage cell line) Whole Cell Lysate

Lane 4 : Liver (Human) Tissue Lysate - fetal normal tissue

Lane 5 : Liver (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 55, 67 kDa

Observed band size: 55 kDa

Exposure time: 1 minute

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes.

The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab203464 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

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