

Datasheet: VPA00846

Description:	RABBIT ANTI IRP1
Specificity:	IRP1
Format:	Purified
Product Type:	PrecisionAb Polyclonal
Isotype:	Polyclonal IgG
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type.

Target Species

Human

Species Cross Reactivity

Reacts with: Rat
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Rabbit polyclonal antibody purified by affinity chromatography on immunogen

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
 <50% Glycerol

Immunogen

Recombinant protein of human IRP1

External Database**Links****UniProt:**

[P21399](#) [Related reagents](#)

Entrez Gene:

[48](#) ACO1 [Related reagents](#)

Synonyms

IREB1

Specificity

Rabbit anti Human IRP1 antibody recognizes IRP1, also known as IRE-BP 1, citrate hydro-lyase, ACO1 and cytoplasmic aconitate hydratase.

The protein encoded by ACO1 is a bifunctional, cytosolic protein that functions as an essential enzyme in the TCA cycle and interacts with mRNA to control the levels of iron inside cells. When cellular iron levels are high, this protein binds to a 4Fe-4S cluster and functions as an aconitase. Aconitases are iron-sulfur proteins that function to catalyze the conversion of citrate to isocitrate. When cellular iron levels are low, the protein binds to iron-responsive elements (IREs), which are stem-loop structures found in the 5' UTR of ferritin mRNA, and in the 3' UTR of transferrin receptor mRNA. When the protein binds to IRE, it results in repression of translation of ferritin mRNA, and inhibition of degradation of the otherwise rapidly degraded transferrin receptor mRNA. Alternative splicing results in multiple transcript variants (provided by RefSeq, May 2013).

Rabbit anti Human IRP1 antibody detects a band of 98 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti IRP1 antibody recognizes a band of approximately 98 kDa in HCT116 cell lysates

Storage

Store undiluted at -20°C, avoiding repeated freeze thaw cycles

Guarantee

12 months from date of despatch

Acknowledgements

PrecisionAb is a trademark of Bio-Rad Laboratories

Health And Safety Information

Material Safety Datasheet documentation #10049 available at:
10049: <https://www.bio-rad-antibodies.com/uploads/MSDS/10049.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rabbit IgG (H/L) (STAR208...) [HRP](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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