

Datasheet: VPA00165KT

Description:	CALRETICULIN PRECURSOR ANTIBODY WITH CONTROL LYSATE
Specificity:	CALRETICULIN PRECURSOR
Format:	Purified
Product Type:	PrecisionAb Polyclonal
Isotype:	Polyclonal IgG
Quantity:	2 Westerns

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

PrecisionAb antibodies have been extensively <u>validated for the western blot</u> <u>application.</u> The antibody has been validated at the suggested dilution. 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 dependant on sample type.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	20μl Rabbit polyclonal antibody purified by affinity chromatography
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) <30% Glycerol
Immunogen	Synthetic peptide corresponding to the C terminus of human calreticulin precursor protein
External Database Links	UniProt:

Entrez Gene:

P27797

Related reagents

Synonyms

CRTC

Specificity

Rabbit anti Human calreticulin precursor antibody recognizes calreticulin precursor also known as CRP55, calregulin, endoplasmic reticulum resident protein 90 (ERp60) and grp60.

Calreticulin is a multifunctional protein that acts as a major Ca(2+)-binding (storage) protein in the lumen of the endoplasmic reticulum. It is also found in the nucleus, suggesting that it may have a role in transcription regulation. Calreticulin binds to the synthetic peptide KLGFFKR, which is almost identical to an amino acid sequence in the DNA-binding domain of the superfamily of nuclear receptors.

Calreticulin binds to antibodies in certain sera of systemic lupus and Sjogren patients which contain anti-Ro/SSA antibodies, it is highly conserved among species, and it is located in the endoplasmic and sarcoplasmic reticulum where it may bind calcium. The amino terminus of calreticulin interacts with the DNA-binding domain of the glucocorticoid receptor and prevents the receptor from binding to its specific glucocorticoid response element. Calreticulin can inhibit the binding of androgen receptor to its hormoneresponsive DNA element and can inhibit androgen receptor and retinoic acid receptor transcriptional activities in vivo, as well as retinoic acid-induced neuronal differentiation. Thus, calreticulin can act as an important modulator of the regulation of gene transcription by nuclear hormone receptors. Systemic lupus erythematosus is associated with increased autoantibody titers against calreticulin but calreticulin is not a Ro/SS-A antigen. Earlier papers referred to calreticulin as an Ro/SS-A antigen but this was later disproven. Increased autoantibody titer against human calreticulin is found in infants with complete congenital heart block of both the IgG and IgM classes (provided by RefSeq, Jul 2008).

Rabbit anti Human calreticulin precursor antibody detects a band of 55 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti calreticulin precursor detects a band of approximately 55 kDa in Jurkat cell lysates.

Instructions For Use

Please refer to the PrecisionAb western blotting protocol. For additional information on secondary antibody dilution and exposure time see product web page.

Lysate Composition

400µg Jurkat lysate lyophilized in RIPA buffer.

- Lysate Reconstitution If using DDT reconstitute the lyophilized lysate with 190µl DI H2O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.
 - If using BME reconstitute the lyophilized lysate with 180µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.

Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.

Storage

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

Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.

Guarantee	As supplied, 12 months from date of despatch.
Acknowledgements	PrecisionAb™ is a trademark of Bio-Rad Laboratories.
Health And Safety Information	Material Safety Datasheet documentation #10049 #10561 available at: Antibody (10049): https://www.bio-rad-antibodies.com/uploads/MSDS/10049.pdf Lysate Material (10561): https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

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