

Datasheet: MCA6361

Description:	RABBIT ANTI CALD1
Specificity:	CALD1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	RM396
Isotype:	IgG
Quantity:	0.1 ml

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
Immunohistology - Paraffin	▪			1/100 - 1/200
Western Blotting	▪			1/100 - 1/1000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Based on sequence similarity, is expected to react with: Mouse, 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

Purified IgG prepared by affinity chromatography on Protein A from animal origin-free culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin

50% Glycerol

Immunogen A peptide corresponding to the C-terminus of human CALD1. This antibody may also react to mouse or rat CALD1, as predicted by immunogen homology

External Database

Links

UniProt:

[Q05682](#)

[Related reagents](#)

Entrez Gene:

[800](#)

CALD1

[Related reagents](#)

Synonyms

CAD, CDM

Specificity

Rabbit anti CALD1 antibody recognizes caldesmon, also known as CDM and CAD.

CALD1 is an actin-binding protein which is also able to bind myosin, calmodulin and tropomyosin, and inhibits the actin-activated myosin ATPase by blocking actin-myosin interaction. As a "side-binder" of actin, CALD1 stabilizes the filamentous structure of actin and is therefore profoundly involved with assembly and organization of the actin cytoskeleton ([Wang 2008](#)). CALD1 negatively regulates cell proliferation and migration and release of metalloproteinase, and is itself regulated by a range of kinases at multiple phosphorylation sites ([Hai 2015](#)). It is found in smooth muscle and non-muscle cells. In smooth muscle, CALD1 appears to regulate smooth muscle contraction and cell motility ([Eves et al. 2006](#)). CALD1 has been observed to be downregulated in many cancer cell types and has been identified as a potent suppressor of cell invasion, regulating podosome/invadopodium formation of cancer cells ([Yoshio et al. 2007](#)).

Storage

Store at -20°C only.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10048 available at:
10048: <https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight@488](#), [DyLight@680](#), [DyLight@800](#)

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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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