P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Caldesmon, HMW (h-Caldesmon) (Smooth Muscle Marker); Clone CALD1/820 & h-CALD

(Concentrate)

Availability/Contents:

Item #	Volume
RA0030-C.5	0.5 ml

Description:

Species:	Mouse
Immunogen:	Recombinant human CALD1 protein (CALD1/820); Crude human uterus extract (h-CALD)
Clone:	CALD1/820 & h-CALD
Isotype:	IgG1, kappa (CALD1/820); IgG1, kappa (h-CALD)
Entrez Gene ID:	800 (Human)
Hu Chromosome Loc.:	7q33
Synonyms:	CAD; CALD1; Caldesmon 1 Isoform 1; Caldesmon 1 Isoform 2; Caldesmon 1 Isoform 3; Caldesmon 1 Isoform 4; Caldesmon 1 Isoform 5; CDM; HCAD; LCAD; NAG22
Mol. Weight of Antigen:	150kDa
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Recognizes a protein of 150kDa, which is identified as the high molecular weight variant of Caldesmon. This MAb recognizes only the 150kDa variant (h-Caldesmon) in Western blots of human aortic media extracts and is unreactive with fibroblast extracts from cultivated human foreskin.
Background:	Two closely related variants of human Caldesmon have been identified which are different in their electrophoretic mobility and cellular distribution. The h-Caldesmon variant (120–150kDa) is predominantly expressed in smooth muscle whereas l-Caldesmon (70–80kDa) is found in non-muscle tissue and cells. Neither of the two variants has been detected in skeletal muscle. Caldesmon is a developmentally regulated protein involved in smooth muscle and non-muscle contraction.
Species Reactivity:	Human. Others not known.
Positive Control:	Uterus
Cellular Localization:	Cytoplasmic
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml
	Flow Cytometry: 0.5-1 µg/million cells
	Immunofluorescence: 1-2 µg/ml
	Western Blotting: 0.5-1 µg/ml
	Immunoprecipitation: 1-2 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc.
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EC REP EmergoEurope (31)(0) 70 345-8570
Molsnstraat 15
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Uses/Limitations:

Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com

Procedure:

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with EDTA Buffer (10X) HIER Solution (pH 8.0) (ScyTek catalog# ETA).

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Watanabe, K., Tajino, T., Sekiguchi, M. and Suzuki, T. 2000. H-Caldesmon as a specific marker for smooth muscle tumors. Comparison with other smooth muscle markers in bone tumors. Am. J. Clin. Pathol. 113: 663-668.
2. Frid MG, et al. Phenotypic changes of human smooth muscle cells during development: Late expression of heavy caldesmon and calponin. Dev Biol 1992; 153:185.

Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C – 8° C

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