

Instructions for Use ARA0029-IFU

Rev. Date: March. 1, 2016

Revision: 1

Page 1 of 2

Caldesmon, HMW (h-Caldesmon) (Smooth Muscle Marker): Clone CALD1/820 (Concentrate)

Description:

Species: Mouse

Immunogen: Recombinant human CALD1 protein

Clone: CALD1/820 Isotype: IgG1, kappa 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 I-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

 $\begin{tabular}{ll} Immunofluorescence: & 1-2 \ \mu g/ml \\ Western Blotting: & 0.5-1 \ \mu g/ml \\ \end{tabular}$

Immunoprecipitation: 1-2 μg/500μg protein lysate

Microbiological State: This product is not sterile.



Instructions for Use ARA0029-IFU

Rev. Date: March. 1, 2016

Revision: 1

Page 2 of 2

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.

Procedure:

Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with EDTA-based antigen retrieval, pH 8.0. We suggest an antibody incubation period of 30-60 minutes at room temperature or overnight at 2-8 C. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user. For maximum staining intensity, we recommend using AviBond Ultra for detection and DAB Clarity Ultra products for visualization.

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.

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. Teomics 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.

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.