

DOG-1 / TMEM16A (Marker for Gastrointestinal Stromal Tumors); Clone DG1/447 & DOG-1.1 (Concentrate)

Availability/Contents:

<u>Item #</u>	<u>Volume</u>
RA0364-C.5	0.5 ml

Description:

Species: Mouse

Immunogen: Recombinant human DOG-1 protein (DG1/447); A synthetic peptide from human DOG-1 protein (MSDFVDWVIPDIPKDISQQIHKEKVLVVELFMREEQDKQQLLETCKMEKERQKDEPPCNHH NTKACPDSLGSPPASHAYHGGVL), conjugated to a carrier protein (DOG-1.1).

Clone: DG1/447 & DOG-1.1

Isotype: IgG1, kappa (DG1/447 & DOG-1.1)

Entrez Gene ID: 55107 (Human)

Hu Chromosome Loc.: 11q13.3

Synonyms: Anoctamin 1, Calcium Activated Chloride Channel, Discovered On Gastrointestinal Stromal Tumors Protein 1, TAOS2, ORAOV2, TMEM16A.

Mol. Weight of Antigen: ~114kDa

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: This monoclonal antibody recognizes Human DOG1. It is a sensitive and specific immunohistochemical marker for GIST, comparable with c-Kit, with the additional benefit of detecting c-Kit-negative GISTs. It is also a sensitive marker for unusual GIST subgroups lacking c-Kit or PDGFRA mutations.

Background: Expression of DOG-1 protein is elevated in the gastrointestinal stromal tumors (GIST's), c-Kit signaling-driven mesenchymal tumors of the GI tract. DOG-1 is rarely expressed in other soft tissue tumors, which, due to appearance, may be difficult to diagnose. Immunoreactivity for DOG-1 has been reported in 97.8% of scorable GIST's, including all c-Kit negative GIST's. Overexpression of DOG-1 has been suggested to aid in the identification of GISTs, including platelet-derived growth factor alpha receptor mutants that fail to express c-Kit antigen. The overall sensitivity of DOG1 and c-Kit in GIST's is nearly identical: 94.4% vs. 94.7%.

Species Reactivity: Human. Others not known.

Positive Control: Gastrointestinal Stromal Tumor (GIST) or testicular germ cell tumor. Melanocytes in the basal layer of the epidermis and mast cells in the dermis of normal skin.

Cellular Localization: Cell Surface and cytoplasmic

Titer/ Working Dilution: Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml
Flow Cytometry: 0.5-1 µg/million cells
Immunofluorescence: 0.5-1 µg/ml
Western Blotting: 0.5-1 µg/ml
Immunoprecipitation: 0.5-1 µg/500µg protein lysate


Microbiological State: This product is not sterile.

Storage: 2° C  8° C

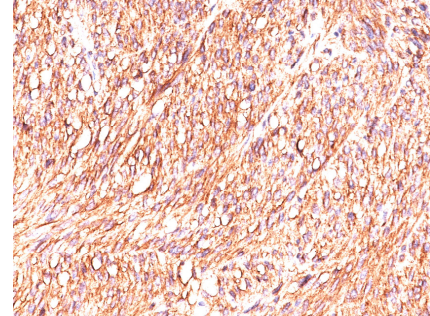


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Uses/Limitations: Not to be taken internally.
 For Research Use Only.
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
 Do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



Ordering Information and Current Pricing at www.scytek.com

Formalin-fixed, paraffin-embedded GIST (20X) stained with DOG1; Clone DG1/447 & DOG-1.1.

Procedure:

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Citrate Plus (ScyTek catalog# CPL500).
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. Espinosa I, et. al. Am J Surg Pathol 2008;32:210–218.

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Storage: 2° C  8° C

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