

DOG-1 / TMEM16A Monoclonal Mouse Antibody (DG1/1486)



Product Description

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 percent 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 Receptor Alpha 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%.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1486, Anti-DOG-1 (DG1/1486)

Call us : <u>800-304-5357</u>

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| Product attributes | | | | |
|--|---|--|--|--|
| Antibody number | #1486 | | | |
| Antibody reactivity (target) | DOG-1, TMEM16A | | | |
| Antibody type | Primary | | | |
| Host species | Mouse | | | |
| Clonality | Monoclonal | | | |
| Clone | DG1/1486 | | | |
| Isotype | lgG2b, kappa | | | |
| Molecular weight | ~114 kDa | | | |
| Synonyms | Anoctamin 1; Calcium Activated Chloride Channel; Discovered On Gastrointestinal Stromal Tumors Protein 1; TAOS2; ORAOV2; TMEM16A | | | |
| Human gene symbol | TMEM16A | | | |
| Entrez gene ID | 55107 | | | |
| SwissProt | Q5XXA6 | | | |
| Unigene | 503074 | | | |
| Immunogen | Recombinant human DOG-1 protein fragment (aa 2-101) (exact sequence is proprietary) | | | |
| Verified antibody applications | IHC (FFPE) (verified) | | | |
| Antibody target cellular localization | Plasma membrane, Nucleus | | | |
| Species reactivity | Human | | | |
| Antibody application notes | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology (formalin): 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user | | | |
| 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. | | | |
| Shipping condition | Room temperature | | | |
| Storage Conditions | Store at 2 to 8 $^\circ\text{C},$ Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ\text{C}$ | | | |
| Shelf life | Guaranteed for at least 24 months from date of receipt when stored as recommended | | | |
| Regulatory status | For research use only (RUO) | | | |
| Antibody/conjugate formulation | Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide | | | |
| Validated in protein array | Monospecific | | | |
| Antibody research areas | Cancer | | | |
| Product origin | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot. | | | |
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Tumor expression

Gastrointestinal cancer

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|-------------------|-----------------------|-----------------------|------------|-----------------------------|------------------|
| Antibody # prefix | Conjugation | Ex/Em (nm) | Laser line | Detection channel | Dye Features |
| BNC04 | CF®405S | 404/431 | 405 | DAPI (microscopy), AF405 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 Features |
| BNCB | Biotin | N/A | N/A | N/A | |
| BNUB | Purified | N/A | N/A | N/A | |
| BNUM | Purified, BSA-free | N/A | N/A | N/A | |

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