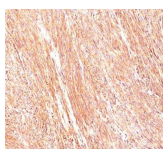


# DOG-1 / TMEM16A Monoclonal Mouse Antibody (DG1/447)



## Product Description

Expression of DOG-1 protein is elevated in the gastrointestinal stromal tumors (GISTs), 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 GISTs, including all c-kit negative GISTs. 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 GISTs 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 [CF® Dye Brochure](#) 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 [order@biotium.com](mailto:order@biotium.com) to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0447, Anti-DOG-1 (DG1/447)**

Call us : [800-304-5357](tel:800-304-5357)

## Product attributes

|  |  |
|--|--|
| <b>Antibody number</b>                       | #0447  |
| <b>Antibody reactivity (target)</b>          | DOG-1, TMEM16A   |
| <b>Antibody type</b>                         | Primary  |
| <b>Host species</b>                          | Mouse  |
| <b>Clonality</b>                             | Monoclonal   |
| <b>Clone</b>                                 | DG1/447  |
| <b>Isotype</b>                               | IgG1, kappa  |
| <b>Molecular weight of antigen</b>           | ~114 kDa   |
| <b>Synonyms</b>                              | Anoctamin 1; Calcium Activated Chloride Channel; Discovered On Gastrointestinal Stromal Tumors Protein 1; TAOS2; ORAOV2; TMEM16A   |
| <b>Human gene symbol</b>                     | TMEM16A  |
| <b>Entrez gene ID</b>                        | 55107  |
| <b>SwissProt</b>                             | Q5XXA6   |
| <b>Unigene</b>                               | 503074   |
| <b>Immunogen</b>                             | Recombinant human DOG-1 protein  |
| <b>Antibody target cellular localization</b> | Plasma membrane, Nucleus   |
| <b>Verified antibody applications</b>        | IHC (FFPE) (verified)  |
| <b>Species reactivity</b>                    | Human  |
| <b>Antibody application notes</b>            | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Flow cytometry: 0.5-1 ug/million cells, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 0.25-0.5 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 minutes. Optimal dilution for a specific application should be determined by user |
| <b>Positive control</b>                      | 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.  |
| <b>Shipping condition</b>                    | Room temperature   |
| <b>Storage Conditions</b>                    | Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C  |
| <b>Shelf life</b>                            | Guaranteed for at least 24 months from date of receipt when stored as recommended  |
| <b>Regulatory status</b>                     | For research use only (RUO)  |
| <b>Antibody/conjugate formulation</b>        | 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  |
| <b>Antibody research areas</b>               | Cancer   |
| <b>Product origin</b>                        | 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.  |
| <b>Tumor expression</b>                      | Gastrointestinal cancer  |

| Antibody # prefix | Conjugation        | Ex/Em (nm) | Laser line | Detection channel        | Dye Features                     |
|-------------------|--------------------|------------|------------|--------------------------|----------------------------------|
| BNC04             | CF®405S            | 404/431    | 405        | DAPI (microscopy), AF405 | <a href="#">CF®405S Features</a> |
| BNC88             | CF®488A            | 490/515    | 488        | GFP, FITC                | <a href="#">CF®488A Features</a> |
| BNC68             | CF®568             | 562/583    | 532, 561   | RFP, TRITC               | <a href="#">CF®568 Features</a>  |
| BNC94             | CF®594             | 593/614    | 561        | Texas Red®               | <a href="#">CF®594 Features</a>  |
| BNC40             | CF®640R            | 642/662    | 633-640    | Cy®5                     | <a href="#">CF®640R Features</a> |
| BNC47             | CF®647             | 650/665    | 633-640    | Cy®5                     | <a href="#">CF®647 Features</a>  |
| BNC74             | CF®740             | 742/767    | 633-685    | 775/50                   | <a href="#">CF®740 Features</a>  |
| 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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Product link: <https://biotium.com/product/monoclonal-anti-dog-1-dg1447/>