

## 36-2988: Anti-DOG-1 / TMEM16A (Gastrointestinal Stromal Tumor Marker) Monoclonal Antibody (Clone: DG1/1485)

|                                |  |
|--------------------------------|--|
| <b>Clonality :</b>             | Monoclonal   |
| <b>Clone Name :</b>            | DG1/1485   |
| <b>Application :</b>           | IHC  |
| <b>Reactivity :</b>            | Human  |
| <b>Gene :</b>                  | TMEM16A  |
| <b>Gene ID :</b>               | 55107  |
| <b>Uniprot ID :</b>            | Q5XX6  |
| <b>Alternative Name :</b>      | Anoctamin 1; Calcium Activated Chloride Channel; Discovered On Gastrointestinal Stromal Tumors Protein 1; TAOS2; ORAOV2; TMEM16A |
| <b>Isotype :</b>               | Mouse IgG2b, kappa   |
| <b>Immunogen Information :</b> | Recombinant human DOG-1 protein fragment (around aa 2-101) (exact sequence is proprietary)                                       |

### 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%.

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 µg / 100 µg  |
| <b>Content :</b>           | 200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| <b>Storage condition :</b> | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.                               |

### Application Note

Immunohistochemistry (Formalin-fixed) (1-2µg/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

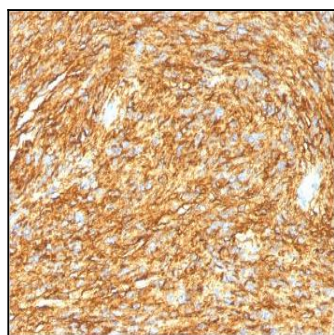


Fig. 1: Formalin-fixed, paraffin-embedded human GIST stained with DOG-1 Mouse Monoclonal Antibody (DG1/1485).

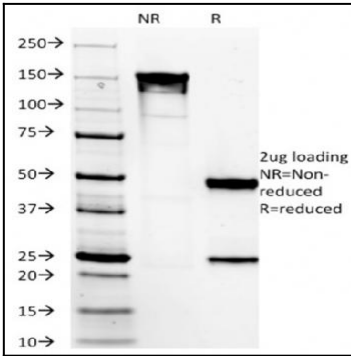


Fig. 2: SDS-PAGE Analysis Purified DOG-1 Mouse Monoclonal Antibody (DG1/1485). Confirmation of Integrity and Purity of Antibody

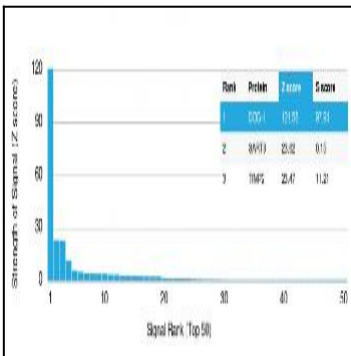


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using DOG-1 Mouse Monoclonal Antibody (DG1/1485). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.