

**Mouse Anti-DOG1 [DOG1.1]: MC0362, MC0362RTU7**

**Intended Use:** For Research Use Only

**Description:** DOG-1, a 986 amino acid protein of unknown function, is expressed predominantly on the plasma membrane of gastrointestinal stromal tumors (GISTs) and is rarely expressed in other soft tissue tumors, which, due to appearance, can be confused with GISTs. Immunoreactivity for DOG-1 has been reported to be found in 97.8 percent of scorable GISTs, including all KIT negative GISTs. In addition, DOG1.1 immunoreactivity was seen in fewer cases of carcinoma, melanoma, and seminoma as compared with KIT. DOG1.1 is a sensitive and specific immunohistochemical marker for GIST, comparable with KIT, with the additional benefit of detecting KIT-negative GISTs. DOG1.1 is also a sensitive marker for unusual GIST subgroups lacking KIT or PDGFRA mutations. In tumors that are negative for both KIT and DOG1.1, mutational screening may be required to confirm the diagnosis of GIST.

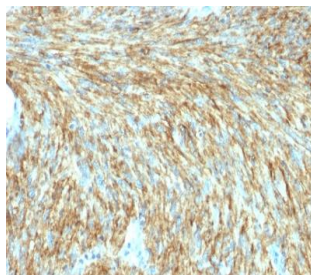
**Specifications**

Clone: DOG1.1  
 Source: Mouse  
 Isotype: IgG1k  
 Reactivity: Human  
 Localization: Membrane and cytoplasm  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
DOG1 Concentrated	MC0362	1 ml
DOG1 Prediluted	MC0362RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Breast cancer, GIST  
 Concentrated Dilution: 50-200  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual  
 \* Result should be confirmed by an established diagnostic procedure.



FFPE human GIST tissue stained with anti-DOG1 using DAB

**References:**

1. Small-molecule activators of TMEM16A, a calcium-activated chloride channel, stimulate epithelial chloride secretion and intestinal contraction. Finkbeiner WE, et al. FASEB J. 2011-11-01.
2. Gastrointestinal stromal tumor with structures resembling intracytoplasmic lumina. Xu X, et al. Ultrastruct Pathol. Oct;34(5):301-6, 2010.
3. Evaluation of the Novel Monoclonal Antibody Against DOG1 as a Diagnostic Marker for Gastrointestinal Stromal Tumors. Abdel-Hadi M, et al. J Egypt Natl Canc Inst. Sep;21(3):237-47, 2009.
4. Monoclonal antibody DOG1.1 shows higher sensitivity than KIT in the diagnosis of gastrointestinal stromal tumors, including unusual subtypes. Bernadette Liegl, et al. The American journal of surgical pathology. 12: 33(3):437-46, 2008.

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Rev. B