

## DOG1 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX50027

Clone# BP6032

**Predicted Molecular Wt:** 114kDa  
**Species Cross-reactivity:** Human  
**Applications:** IHC-P

**Purity:** ProA affinity purified IgG  
**Form:** Liquid  
**Swissprot ID:** Q5XXA6

### Background:

DOG1 is a calcium-dependent chloride channel protein that is encoded by a gene called TMEM16A (TMEM16 FLJ10261, ANO1, ORAOV2, and AOS2) located on chromosome 11q13. DOG1 has many significant functions such as regulation of the cholinergic activity of gastrointestinal smooth muscle and regulation of both the survival and proliferation of cells.

DOG1 is detected in gastrointestinal Cajal cells, acinic cells in salivary glands (apical membrane staining, particularly in serous cells), pancreatic centroacinar cells, liver cells, and epithelium of biliary tract, breast, stomach, and prostate. More than 90% of all gastrointestinal stromal tumors (GISTs) are DOG1 positive, irrespective of kit mutation and CD117 positivity. The staining pattern varies from cytoplasmic to membranous, with usually strong, diffuse intensity.

DOG1 is an important marker in the identification of GIST together with CD117, slightly more sensitive (particularly in gastric GIST without c-kit mutation) and also more specific than CD117. DOG1 is also useful in the classification of salivary carcinomas, and pancreatic and renal tumors.

### Subcellular location:

Membrane/Cytoplasm

### Recommended method:

Heat induced epitope retrieval with Tris-EDTA buffer (pH 9.0), primary antibody incubate at RT (18°C-25°C) for 30 minutes.

### Immunogen:

Synthetic peptide corresponding to DOG1 residues within aa1-100 of DOG1 was used as an immunogen.

### Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

### Storage conditions:

-20°C

### Storage instructions:

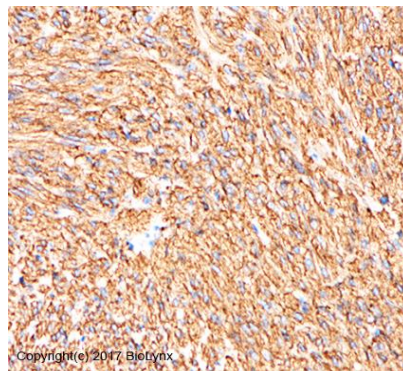
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

### Recommended Dilutions:

IHC-P: 1:100-1:200

### Background References:

1. Jung SH, et.al, Gut Liver. 2011 Jun;5(2):171-80.
2. Bergmann F, et.al, Hum Pathol. 2011 Jun;42(6):817-23.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections analysis of GIST tissue labelling DOG1 with BP6032. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0

Product QC'd by:



For research use only. Not for use in diagnostic or therapeutic applications.