

### **GIT1** Antibody

GIT1 Antibody, Clone S39B-8 Catalog # ASM10247

### **Specification**

#### **GIT1 Antibody - Product Information**

Application ICC/IF, WB
Primary Accession Other Accession NP\_1140021.1

Host Mouse Isotype IgG1

Reactivity Human, Mouse,

Rat

Clonality Monoclonal

Format FITC

Description

Mouse Anti-Rat GIT1 Monoclonal IgG1

# **Target/Specificity**

Detects  $\sim$ 90kDa. Does not cross-react with GIT2.

# **Other Names**

ARF GAP GIT1 Antibody, ARF GTPase-activating proteinAntibody, CAT1 Antibody, GRK-interacting protein 1 Antibody, ARF GTPase-activating protein GIT1 Antibody, Cool-associated and tyrosine-phosphorylated protein 1 Antibody, G protein-coupled receptor kinase-interactor 1 Antibody, GIT 1 Antibody

### **Immunogen**

Fusion protein amino acids 375-770 (C-terminus) of rat GIT1

# **Purification**Protein G Purified

Storage -20°C Storage Buffer

PBS pH7.4, 50% glycerol, 0.09% sodium

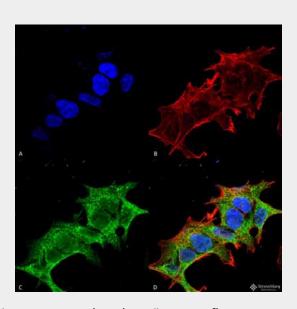
azide

Shipping Blue Ice or 4°C

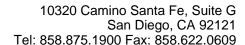
Temperature

**Certificate of Analysis** 

1  $\mu$ g/ml of SMC-413 was sufficient for detection of GIT1 in 10  $\mu$ g of rat brain lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GIT1 Monoclonal Antibody, Clone S39B-8 (ASM10247). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-GIT1 Monoclonal Antibody (ASM10247) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000; 1:5000 for 60 min RT, 5 min RT. Localization: Cytoplasm . Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) GIT1 Antibody (D) Composite.



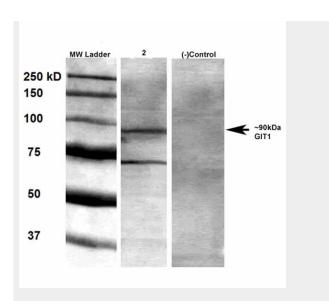


# Cellular Localization Cytoplasm

# **GIT1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

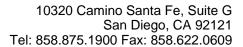


Western Blot analysis of Rat brain membrane lysate showing detection of GIT1 protein using Mouse Anti-GIT1 Monoclonal Antibody, Clone S39B-8 (ASM10247). Primary Antibody: Mouse Anti-GIT1 Monoclonal Antibody (ASM10247) at 1:1000.

## **GIT1 Antibody - Background**

G-protein coupled receptor (GPCR) kinase interacting proteins 1 and 2 (GIT-1 and GIT-2) are highly conserved, ubiquitous scaffold proteins involved in localized signaling to help regulate focal contact assembly and cytoskeletal dynamics. GIT proteins contain multiple interaction domains that allow interaction with small GTPases (including ARF, Rac and cdc42), kinases (such as PAK and MEK), the Rho family GEF PIX, and the focal adhesion protein paxillin (reviewed in 1). GIT-1 is localized to focal adhesions, cytoplasmic complexes and membrane protrusions, and regulates cell protrusion formation and cell migration (2). GIT-1 has also been implicated in neuronal functions including synapse formation (3) and the pathology of Huntington disease (4). Huntington disease is a genetic neurodegenerative condition involving a mutation in the huntington gene. The huntington gene product (htt) is ubiquitinated and degraded in human Huntington disease brains (5). Htt interacts directly with GIT-1 causing enhanced htt proteolysis, indicating that GIT-1 distribution and function may contribute to Huntington disease pathology (4).

### **GIT1 Antibody - References**





1. Hoefen R.J. and Berk B.C. (2006) J. Cell Sci. 119: 146 1475.

- 2. Manabe R., et al. (2002) J. Cell Sci. 115: 1497-1510.
- 3. Zhang H., et al. (2003) J. Cell Biol. 161: 131-142.
- 4. Goehler H., et al. (2004) Mol. Cell 15: 853-865.
- 5. Mende-Mueller L.M., et al. (2001) J. Neurosci. 21: 1830-1837.