10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GIT1 Antibody
GIT1 Antibody, Clone S39B-8
Catalog # ASM10247

Specification

GIT1 Antibody - Product Information

Application	**WB**
Primary Accession	Q9Z272.1
Other Accession	NP_1140021.1
Host	**Mouse**
Isotype	**IgG1**
Reactivity	**Human, Mouse, Rat**
Clonality	**Monoclonal**

Description
Mouse Anti-Rat GIT1 Monoclonal IgG1

Target/Specificity
Detects ~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	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

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

Cellular Localization
Cytoplasm

GIT1 Antibody - Protocols

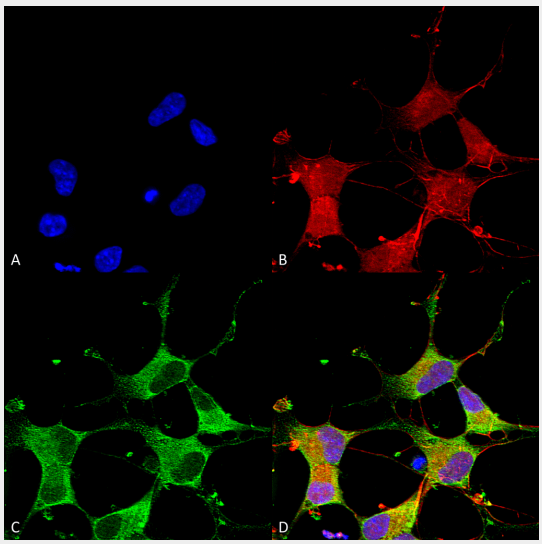
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

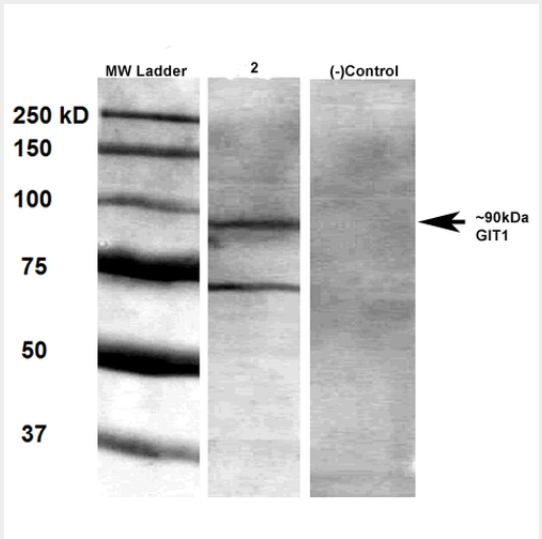
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GIT1 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-GIT1 Monoclonal Antibody, Clone N39B/8 (ASM10247). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-GIT1 Monoclonal Antibody (ASM10247) at 1:50 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) GIT1 Antibody (D) Composite.



Western Blot analysis of Rat brain membrane lysate showing detection of GIT1 protein using Mouse Anti-GIT1 Monoclonal Antibody, Clone N39B/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.