

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human GIT1 in direct ELISAs and human, mouse, and rat GIT1 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 924640
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GIT1 Ser485-Asp636 Accession # Q9Y2X7
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	0.25-1 µg/10 ⁶ cells	SH-SY5Y human neuroblastoma cell line fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005)

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

GIT1 (ARF GTPase-activating protein GIT1) is a 95 kDa protein that belongs to ADP ribosylation factor family and is localized to focal adhesions, cytoplasmic complexes and membrane protrusions, and regulates cell protrusion formation and cell migration. G-protein coupled receptor (GPCR) kinase interacting proteins 1 and 2 (GIT1 and GIT2) 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. GIT1 has also been implicated in neuronal functions including synapse formation and the pathology of Huntington disease. 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. Htt interacts directly with GIT1 causing enhanced htt proteolysis, indicating that GIT1 distribution and function may contribute to Huntington disease pathology. Within amino acids (aa) 485-636, human and mouse GIT1 share 93% aa sequence identity.

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