

DESCRIPTION

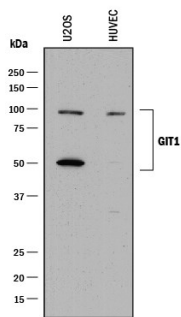
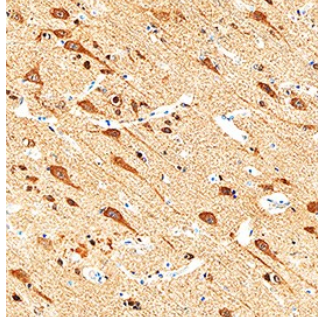
Species Reactivity	Human
Specificity	Detects human GIT1 in direct ELISAs and Western blots.
Source	Polyclonal Rabbit IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human GIT1 Ser485-Asp636 Accession # Q9Y2X7
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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
Western Blot	0.025 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p> 	<p>Detection of Human GIT1 by Western Blot. Western blot shows lysates of U2OS human osteosarcoma cell line and HUVEC human umbilical vein endothelial cells. PVDF membrane was probed with 0.025 µg/mL of Rabbit Anti-Human GIT1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8508) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). Specific bands were detected for GIT1 at approximately 95 & 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>GIT1 in Human Brain. GIT1 was detected in immersion fixed paraffin-embedded sections of human brain (cortex) using Rabbit Anti-Human GIT1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8508) at 0.3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Rabbit HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS005) and counterstained with hematoxylin (blue). Specific staining was localized to neurons. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

GIT-1 (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 (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. GIT-1 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 GIT-1 causing enhanced htt proteolysis, indicating that GIT-1 distribution and function may contribute to Huntington disease pathology. Within amino acids 485-636 human and mouse GIT-1 share 93% aa sequence identity.