

# Rabbit Anti-phospho-GIT1 (Tyr510) antibody

# SL5374R

Product Name:	phospho-GIT1 (Tyr510)
Chinese Name:	磷酸化G protein-coupled receptor激酶相互作用蛋白1抗体
Alias:	GIT1 (phospho Y510); p-GIT1 (phospho Tyr510); ARF GAP GIT1; ARF GTPase activating protein GIT1; CAT 1; Cat1; Cool associated and tyrosine phosphorylated protein 1; G protein coupled receptor kinase interactor 1; GRK interacting protein 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	84kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human GIT1 around the phosphorylation site of Tyr510:SM(p-Y)EP
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Heterotrimeric G protein-mediated signal transduction is a dynamically regulated process with the intensity of signal decreasing over time despite the continued presence of the agonist (1,2). G protein-coupled receptor kinases (GRKs) are activated by

activated G protein-coupled receptors, and they function to phosphorylate and inactivate cell surface receptors in the heterotrimeric G protein signaling cascade (3,4). GIT1 (for GRK-interactor 1) and GIT2 are GTPase-activating proteins (GAP) for members of the ADP ribosylation factor (ARF) family of small GTP-binding proteins, which are involved in vesicular trafficking (5,6). GIT1 overexpression results in reduced internalization and resensitization of b2-adrenergic receptor, thus reducing b2-adrenergic receptor signaling (5).

#### **Function:**

GTPase-activating protein for the ADP ribosylation factor family. May serve as a scaffold to bring together molecules to form signaling modules controlling vesicle trafficking, adhesion and cytoskeletal organization. Increases the speed of cell migration, as well as the size and rate of formation of protrusions, possibly by targeting PAK1 to adhesions and the leading edge of lamellipodia. Sequesters inactive non-tyrosine-phosphorylated paxillin in cytoplasmic complexes.

## Subcellular Location:

Cytoplasm. Cycles between at least 3 distinct intracellular compartments, including focal adhesions, cytoplasmic complexes and membrane protrusions. During cell migration, when cells detach, moves from the adhesions into the cytoplasmic complexes towards the leading edge, while, when cells adhere, it is found in vinculincontaining adhesions. Recruitment to adhesions may be mediated by active tyrosine-phosphorylated paxillin.

#### Post-translational modifications:

Phosphorylated on tyrosine residues by PTK2 and SRC in growing fibroblasts. Tyrosine-phosphorylation is increased following cell spreading on fibronectin, decreased in cells arrested in mitosis and increased in the ensuing G1 phase.

#### Similarity:

Contains 3 ANK repeats.

Contains 1 Arf-GAP domain.

# SWISS:

O9Y2X7

#### Gene ID:

28964

#### Database links:

Entrez Gene: 28964 Human

Entrez Gene: 216963 Mouse

Entrez Gene: 83709 Rat

Omim: 608434 Human

SwissProt: Q9Y2X7 Human

SwissProt: Q68FF6 Mouse

SwissProt: Q9Z272 Rat

Unigene: 514051 Human

Unigene: 290182 Mouse

Unigene: 34521 Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.