

**Phospho-GIT2 (Tyr592) (D6L1J) Rabbit mAb**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W	<b>Reactivity:</b> H	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 85	<b>Source/Isotype:</b> Rabbit IgG	<b>UniProt ID:</b> #Q14161	<b>Entrez-Gene Id:</b> 9815
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**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

Phospho-GIT2 (Tyr592) (D6L1J) Rabbit mAb recognizes endogenous levels of GIT2 protein only when phosphorylated at Tyr592.

**Source / Purification**

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr592 of human GIT2 protein.

**Background**

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 (reviewed in 1). GIT1 and GIT2 share many of the same properties, but with at least ten distinct, tissue-specific splice variants. GIT2 has been shown to play an important role inhibiting focal adhesion turnover and membrane protrusion (2,3). Focal adhesion localization and paxillin binding of GIT2 is regulated through phosphorylation at one or more tyrosine sites (Tyr286, Tyr392, Tyr592) by FAK and/or Src (4,5, reviewed in 6). Once at the focal adhesion, GIT2 is thought to play a key role in cell polarity and migration, making it a protein of interest in the investigation of oncogenic signaling pathways (3,5,7).

**Background References**

1. Hoefen, R.J. and Berk, B.C. (2006) *J Cell Sci* 119, 1469-75.
2. Premont, R.T. et al. (2000) *J Biol Chem* 275, 22373-80.
3. Frank, S.R. et al. (2006) *EMBO J* 25, 1848-59.
4. Brown, M.C. et al. (2005) *Mol Biol Cell* 16, 4316-28.
5. Yu, J.A. et al. (2009) *Mol Biol Cell* 20, 4706-19.
6. Yu, J.A. et al. (2010) *Cell Adh Migr* 4, 342-7.
7. Mazaki, Y. et al. (2006) *Nat Immunol* 7, 724-31.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human

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