

**Goat Anti-GEF5 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1475a****Specification**

---

**Goat Anti-GEF5 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q12774</a>
Other Accession	<a href="#">NP_005426</a> , <a href="#">7984</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	176799

**Goat Anti-GEF5 Antibody - Additional Information****Gene ID** 7984**Other Names**

Rho guanine nucleotide exchange factor 5, Ephexin-3, Guanine nucleotide regulatory protein TIM, Oncogene TIM, Transforming immortalized mammary oncogene, p60 TIM, ARHGEF5, TIM

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-GEF5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-GEF5 Antibody - Protein Information****Name** ARHGEF5**Synonyms** TIM**Function**

Guanine nucleotide exchange factor which activates Rho GTPases (PubMed: [15601624](http://www.uniprot.org/citations/15601624)). Strongly activates RHOA (PubMed: [15601624](http://www.uniprot.org/citations/15601624)). Also strongly activates RHOB, weakly activates RHOC and

RHOG and shows no effect on RHOD, RHOV, RHOQ or RAC1 (By similarity). Involved in regulation of cell shape and actin cytoskeletal organization (PubMed:<a href="http://www.uniprot.org/citations/15601624" target="\_blank">15601624</a>). Plays a role in actin organization by generating a loss of actin stress fibers and the formation of membrane ruffles and filopodia (PubMed:<a href="http://www.uniprot.org/citations/14662653" target="\_blank">14662653</a>). Required for SRC-induced podosome formation (By similarity). Involved in positive regulation of immature dendritic cell migration (By similarity).

#### **Cellular Location**

Cytoplasm. Nucleus Cell projection, podosome {ECO:0000250|UniProtKB:E9Q7D5}

#### **Tissue Location**

Ubiquitously expressed with highest levels in placenta. High levels are also found in colon, kidney, trachea, prostate, liver, pancreas, pituitary gland, thyroid gland and mammary gland. In fetal tissues, expressed at high levels in kidney, lung and liver (PubMed:15601624). Expressed at low levels in lung and heart (PubMed:14662653).

### **Goat Anti-GEF5 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Goat Anti-GEF5 Antibody - Images**



AF1475a (0.1 µg/ml) staining of HeLa Lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### **Goat Anti-GEF5 Antibody - Background**

Rho GTPases play a fundamental role in numerous cellular processes initiated by extracellular stimuli that work through G protein coupled receptors. The encoded protein may form a complex

with G proteins and stimulate Rho-dependent signals. This protein may be involved in the control of cytoskeletal organization.

#### **Goat Anti-GEF5 Antibody - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.

Regulation of immature dendritic cell migration by RhoA guanine nucleotide exchange factor Arhgef5. Wang Z, et al. J Biol Chem, 2009 Oct 16. PMID 19713215.

Disturbance of circadian gene expression in hepatocellular carcinoma. Lin YM, et al. Mol Carcinog, 2008 Dec. PMID 18444243.

Time-resolved mass spectrometry of tyrosine phosphorylation sites in the epidermal growth factor receptor signaling network reveals dynamic modules. Zhang Y, et al. Mol Cell Proteomics, 2005 Sep. PMID 15951569.