

Goat Anti-RANBPM / RANBP9 Antibody

Peptide-affinity purified goat antibody Catalog # AF1910a

Specification

Goat Anti-RANBPM / RANBP9 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW IHC, ICC, E <u>O96559</u> NP_005484, 10048, 56705 (mouse) Human Mouse, Pig, Dog Goat Polyclonal 100ug/200ul IgG 77847

Goat Anti-RANBPM / RANBP9 Antibody - Additional Information

Gene ID 10048

Other Names Ran-binding protein 9, RanBP9, BPM-L, BPM90, Ran-binding protein M, RanBPM, RanBP7, RANBP9, RANBPM

Dilution IHC~~1:100~500 ICC~~N/A E~~N/A

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-RANBPM / RANBP9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-RANBPM / RANBP9 Antibody - Protein Information

Name RANBP9

Synonyms RANBPM



Function

May act as scaffolding protein, and as adapter protein to couple membrane receptors to intracellular signaling pathways (Probable). Acts as a mediator of cell spreading and actin cytoskeleton rearrangement (PubMed: 18710924). Core component of the CTLH E3 ubiquitin-protein ligase complex that selectively accepts ubiquitin from UBE2H and mediates ubiquitination and subsequent proteasomal degradation of the transcription factor HBP1 (PubMed:29911972). May be involved in signaling of ITGB2/LFA-1 and other integrins (PubMed: 14722085). Enhances HGF-MET signaling by recruiting Sos and activating the Ras pathway (PubMed: 12147692). Enhances dihydrotestosterone-induced transactivation activity of AR, as well as dexamethasone-induced transactivation activity of NR3C1, but not affect estrogen-induced transactivation (PubMed:12361945, PubMed:18222118). Stabilizes TP73 isoform Alpha, probably by inhibiting its ubiguitination, and increases its proapoptotic activity (PubMed:15558019). Inhibits the kinase activity of DYRK1A and DYRK1B. Inhibits FMR1 binding to RNA.

Cellular Location

Cytoplasm. Nucleus. Cell membrane; Peripheral membrane protein. Note=The unphosphorylated form is predominantly cytoplasmic. A phosphorylated form is associated with the plasma membrane.

Tissue Location

Ubiquitously expressed, with highest levels in testes, placenta, heart, and muscle, and lowest levels in lung. Within the brain, expressed predominantly by neurons in the gray matter of cortex, the granular layer of cerebellum and the Purkinje cells

Goat Anti-RANBPM / RANBP9 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Goat Anti-RANBPM / RANBP9 Antibody - Images





AF1910a (3 μ g/ml) staining of paraffin embedded human tonsil. Microwaved antigen retrieval with Tris/EDTA buffer pH9, HRP-staining.

Goat Anti-RANBPM / RANBP9 Antibody - Background

This gene encodes a protein that binds RAN, a small GTP binding protein belonging to the RAS superfamily that is essential for the translocation of RNA and proteins through the nuclear pore complex. The protein encoded by this gene has also been shown to interact with several other proteins, including met proto-oncogene, homeodomain interacting protein kinase 2, androgen receptor, and cyclin-dependent kinase 11.

Goat Anti-RANBPM / RANBP9 Antibody - References

RanBPM contributes to TrkB signaling and regulates brain-derived neurotrophic factor-induced neuronal morphogenesis and survival. Yin YX, et al. J Neurochem, 2010 Jul. PMID 20403074. Identification of RanBP 9/10 as interacting partners for protein kinase C (PKC) gamma/delta and the D1 dopamine receptor: regulation of PKC-mediated receptor phosphorylation. Rex EB, et al. Mol Pharmacol, 2010 Jul. PMID 20395553.

Aire's partners in the molecular control of immunological tolerance. Abramson J, et al. Cell, 2010 Jan 8. PMID 20085707.

RanBPM has proapoptotic activities that regulate cell death pathways in response to DNA damage. Atabakhsh E, et al. Mol Cancer Res, 2009 Dec. PMID 19996306.

A fragment of the scaffolding protein RanBP9 is increased in Alzheimer's disease brains and strongly potentiates amyloid-beta peptide generation. Lakshmana MK, et al. FASEB J, 2010 Jan. PMID 19729516.