10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RANGAP1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1960a

Specification

RANGAP1 Antibody - Product Information

Application	**WB, E**
Primary Accession	P46060
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**63.5kDa KDa**

Description
This gene encodes a protein that associates with the nuclear pore complex and participates in the regulation of nuclear transport. The encoded protein interacts with Ras-related nuclear protein 1 (RAN) and regulates guanosine triphosphate (GTP)-binding and exchange. Alternative splicing results in multiple transcript variants.

Immunogen
Purified recombinant fragment of human RANGAP1 (AA: 359-587) expressed in E. Coli.

Formulation
Purified antibody in PBS with 0.05% sodium azide.

RANGAP1 Antibody - Additional Information

Gene ID 5905

Other Names
Ran GTPase-activating protein 1, RanGAP1, RANGAP1, KIAA1835, SD

Dilution
WB~~1/500 - 1/2000
E~~1/10000

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
RANGAP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RANGAP1 Antibody - Protein Information

Name RANGAP1

Synonyms KIAA1835, SD

Function
GTPase activator for RAN (PubMed:16428860, PubMed:8146159, PubMed:8896452). Converts cytoplasmic GTP-bound RAN to GDP-bound RAN, which is essential for RAN-mediated nuclear import and export (PubMed:27160050, PubMed:8896452). Mediates dissociation of cargo from nuclear export complexes containing XPO1, RAN and RANBP2 after nuclear export (PubMed:27160050).

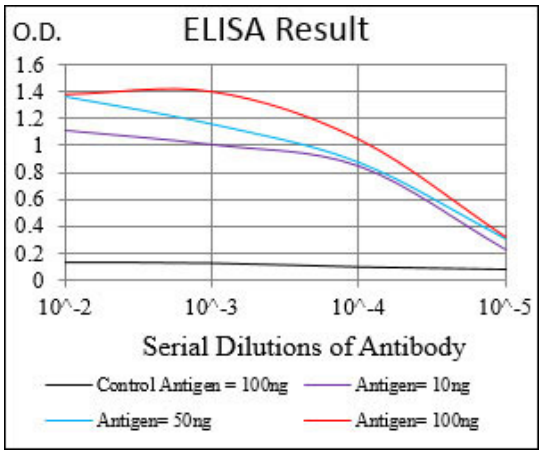
Cellular Location
Cytoplasm. Nucleus, nucleoplasm. Nucleus envelope. Chromosome, centromere, kinetochore. Cytoplasm, cytoskeleton, spindle. Note=Cytoplasmic during interphase Detected at the nuclear envelope during interphase (PubMed:11854305, PubMed:15037602). Targeted to the nuclear pores after sumoylation (PubMed:11854305). During mitosis, associates with mitotic spindles, but is essentially not detected at the spindle poles (PubMed:11854305, PubMed:15037602). Association with kinetochores appears soon after nuclear envelope breakdown and persists until late anaphase (PubMed:11854305). Mitotic location also requires sumoylation (PubMed:11854305).

Tissue Location
Highly expressed in brain, thymus and testis.

RANGAP1 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 Cytomety
- Cell Culture



10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

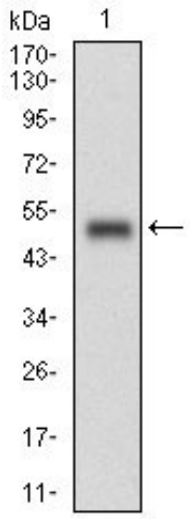


Figure 1: Western blot analysis using RANGAP1 mAb against human RANGAP1 (AA: 359-587) recombinant protein. (Expected MW is 51.4 kDa)

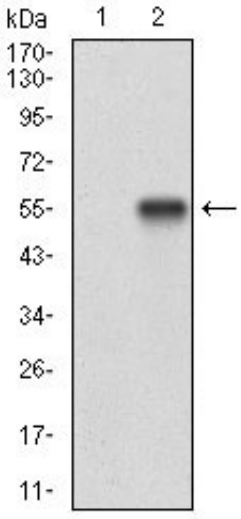


Figure 2: Western blot analysis using RANGAP1 mAb against HEK293 (1) and RANGAP1 (AA: 359-587)-hIgGFc transfected HEK293 (2) cell lysate.

RANGAP1 Antibody - Background

PIWIL4 belongs to the Argonaute family of proteins, which function in development and maintenance of germline stem cells ; ;

RANGAP1 Antibody - References

1. J Cell Biol. 2012 Feb 20;196(4):435-50. 2. Cancer Res. 2011 Jul 15;71(14):4968-76.