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

Product Information

Application	WB, E
Primary Accession	P46060
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4F9E2
Isotype	IgG1
Calculated MW	63542
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.

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.

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.

Background

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

References

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

Images

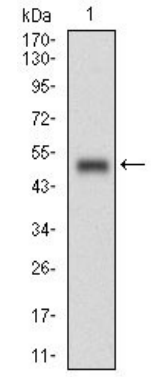

Figure 1: Western blot analysis using RANGAP1 mAb against human RANGAP1 (AA: 359-587) recombinant protein. (Expected MW is 51.4 kDa)

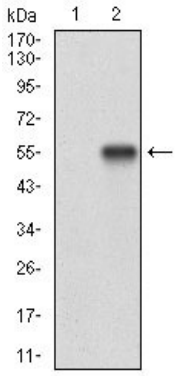

Figure 2: Western blot analysis using RANGAP1 mAb against HEK293 (1) and RANGAP1 (AA: 359-587)-hIgGFc transfected HEK293 (2) cell lysate.