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RanGAP1 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide

Synthetic peptide
Catalog # BP2503a

Specification

RanGAP1 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide - Product Information

Primary Accession	P46060
Other Accession	NP_002874

RanGAP1 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide - Additional Information

Gene ID 5905

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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2503a was selected from the region of human Ran-GTPase Sumoylation site. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RanGAP1 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide - Protein Information

Name RANGAP1

Synonyms KIAA1835, SD

Function
GTPase activator for RAN (PubMed:8146159, PubMed:8896452, PubMed:16428860). Converts cytoplasmic GTP-bound RAN to GDP-bound RAN, which is essential for RAN-mediated nuclear import and export (PubMed:8896452, PubMed:<a

href="http://www.uniprot.org/citations/27160050" target="_blank">27160050). 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 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide - Protocols

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

- Blocking Peptides

RanGAP1 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide - Images

RanGAP1 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide - Background

RanGAP1, is a homodimeric 65-kD polypeptide that specifically induces the GTPase activity of RAN, but not of RAS by over 1,000-fold. RanGAP1 is the immediate antagonist of RCC1, a regulator molecule that keeps RAN in the active, GTP-bound state. The RANGAP1 gene encodes a 587-amino acid polypeptide. The sequence is unrelated to that of GTPase activators for other RAS-related proteins, but is 88% identical to Fug1, the murine homolog of yeast Rna1p. RanGAP1 and RCC1 control RAN-dependent transport between the nucleus and cytoplasm. RanGAP1 is a key regulator of the RAN GTP/GDP cycle.

RanGAP1 (Ran-GTPase) Antibody (Sumoylation Site Specific) Blocking peptide - References

Bischoff, F.R., et al., Proc. Natl. Acad. Sci. U.S.A. 92(5):1749-1753 (1995).Bischoff, F.R., et al., Proc. Natl. Acad. Sci. U.S.A. 91(7):2587-2591 (1994).Matunis, M.J., et al., J. Cell Biol. 135 (6 Pt 1), 1457-1470 (1996).