

Product datasheet for CF501265

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

RANGAP1 Mouse Monoclonal Antibody [Clone ID: OTI1B4]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1B4

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:1000~2000, IHC 1:50, IF 1:100, FLOW 1:100

Reactivity: Human, Dog, Rat, Mouse

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human RANGAP1 (NP_002874) produced in

HEK293T cell.

Formulation: Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)

Reconstitution Method: For reconstitution, we recommend adding 100uL distilled water to a final antibody

concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 63.4 kDa

Gene Name: Ran GTPase activating protein 1

Database Link: NP 002874

Entrez Gene 19387 MouseEntrez Gene 362965 RatEntrez Gene 481234 DogEntrez Gene 5905

<u>Human</u> <u>P46060</u>



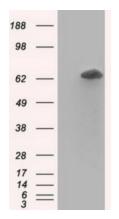


Background:

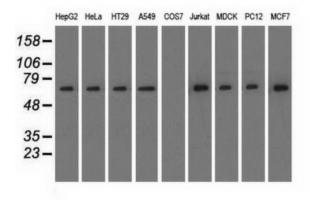
RanGAP1, is a homodimeric 65-kD polypeptide that specifically induces the GTPase activity of RAN, but not of RAS by over 1,000-fold. RanGAP1 is the immediate antagonist of RCC1, a regulator molecule that keeps RAN in the active, GTP-bound state. The RANGAP1 gene encodes a 587-amino acid polypeptide. 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. [provided by RefSeq]

Synonyms: Fug1; RANGAP; SD

Product images:

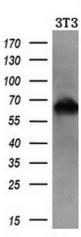


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RANGAP1 (Cat# [RC204223], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RANGAP1(Cat# [TA501265]). Positive lysates [LY401016] (100ug) and [LC401016] (20ug) can be purchased separately from OriGene.

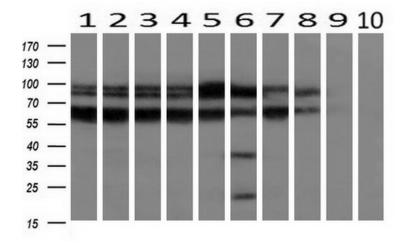


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-RANGAP1 monoclonal antibody.

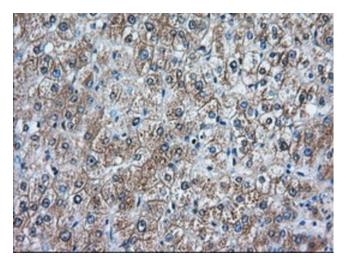




Western blot analysis of extracts (10ug) from a mouse cell line by using anti-RANGAP1 monoclonal antibody (1:200).

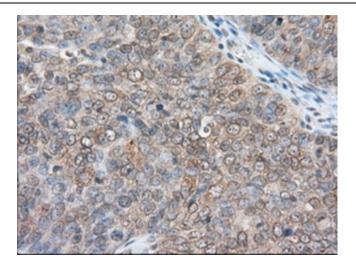


Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-RANGAP1 monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon;10: spleen).

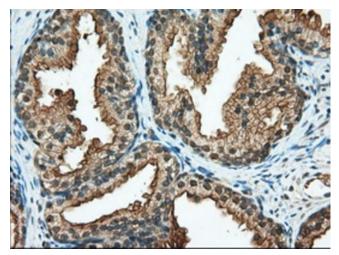


Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-RANGAP1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

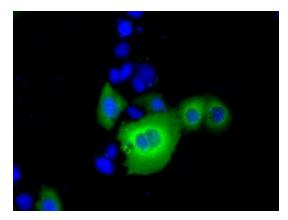




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-RANGAP1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

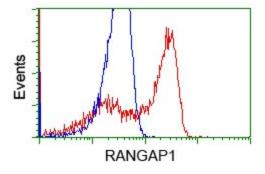


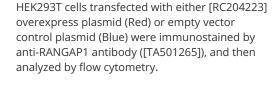
Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-RANGAP1 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

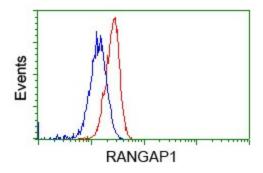


Anti-RANGAP1 mouse monoclonal antibody ([TA501265]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY RANGAP1 ([RC204223]).

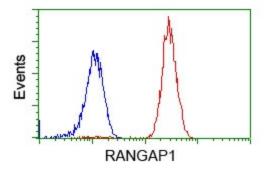








Flow cytometric Analysis of Hela cells, using anti-RANGAP1 antibody ([TA501265]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).



Flow cytometric Analysis of Jurkat cells, using anti-RANGAP1 antibody ([TA501265]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).