

RANBP10 Antibody

Catalog # ASC11094

Specification

RANBP10 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC, IF <u>Q6VN20</u> <u>EAW83167</u>, <u>119603573</u> Human Rabbit Polyclonal IgG RANBP10 antibody can be used for detection of RANBP10 by Western blot at 1 - 2 μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

RANBP10 Antibody - Additional Information

Gene ID Target/Specificity RANBP10;

57610

Reconstitution & Storage

RANBP10 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions RANBP10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RANBP10 Antibody - Protein Information

Name RANBP10

Synonyms KIAA1464

Function

May act as an adapter protein to couple membrane receptors to intracellular signaling pathways (Probable). 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). Enhances dihydrotestosterone-induced transactivation activity of AR, as well as dexamethasone-induced transactivation activity of NR3C1, but does not affect estrogen-induced transactivation (PubMed:18222118). Acts as a guanine nucleotide exchange factor (GEF) for RAN GTPase. May play an essential role in



hemostasis and in maintaining microtubule dynamics with respect to both platelet shape and function (By similarity).

Cellular Location Cytoplasm, cytosol. Nucleus. Note=Predominantly cytoplasmic

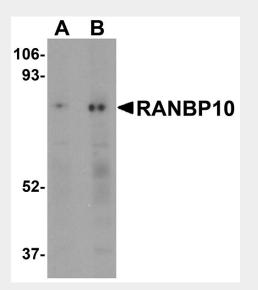
Tissue Location Broadly expressed, with highest levels in skeletal muscle.

RANBP10 Antibody - Protocols

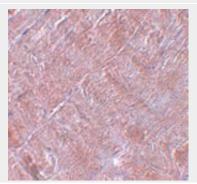
Provided below are standard protocols that you may find useful for product applications.

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

RANBP10 Antibody - Images

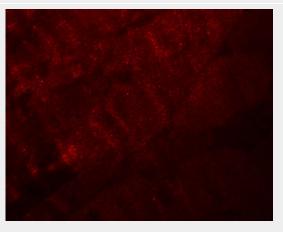


Western blot analysis of RANBP10 in human skeletal muscle tissue lysate with RANBP10 antibody at (A) 1 and (B) 2 μ g/mL.





Immunohistochemistry of RANBP10 in human skeletal muscle tissue with RANBP10 antibody at 5 μ g/mL.



Immunofluorescence of RANBP10 in mouse skeletal muscle tissue with RANBP10 antibody at 20 μ g/mL.

RANBP10 Antibody - Background

RANBP10 Antibody: The RAN binding protein 10 (RANBP10) is a cytoplasmic guanine nucleotide exchange factor that shares high sequence similarity to the MET-interacting protein RANBP9. RANBP10 is expressed in the cytoplasm of mature megakaryocytes (MKs) and platelets where it localizes to polymerized noncentrosomal microtubules. RANBP10 possesses guanine nucleotide exchange factor activity towards RAN, a GTPase involved in nucleocytoplasmic traffic, spindle formation at mitosis, and nuclear envelope assembly during telophase, suggesting that RANBP10 may also be involved in these activities. RANBP10 depletion in vitro caused the disturbance of polymerized filaments in MKs and platelets in RANBP10-null mice exhibited disorders in microtubule filament numbers and localization, indicating that RANBP10 may play a significant role in maintaining microtubule dynamics.

RANBP10 Antibody - References

Wang D, Zaibo Li, Schoen SR, et al. A novel MET-interacting protein shares high sequence similarity with RanBPM, but fails to stimulate MET-induced Ras/ERK signaling. Biochem. Biophys. Res. Comm.2004; 313:320-6.

Schulze H, Dose M, Korpal M, et al. RanBP10 is a cytoplasmic guanine nucleotide exchange factor that modulates noncentrosomal microtubules. J. Biol. Chem.2008; 283:14109-19. Dasso M. The Ran GTPase: theme and variations. Curr. Biol.2002; R502-8.

Kunert S, Meyer I, Fleischhauer S, et al. The microtubule modulator RanBP10 plays a critical role in regulation of platelet discoid shape and degranulation. Blood2009; 114:5532-40.