

RNF4 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8684b

Specification

RNF4 Antibody - Product Information

Application WB,E
Primary Accession P78317
Reactivity Human
Predicted Human
Host Mouse
Clonality monoclonal
Isotype

RNF4 Antibody - Additional Information

Gene ID 6047

Other Names

E3 ubiquitin-protein ligase RNF4, 6.3.2.-, RING finger protein 4, Small nuclear ring finger protein, Protein SNURF, RNF4, SNURF

Target/Specificity

This RNF4 antibody is generated from a mouse immunized with a recombinant protein from the human region of human RNF4.

Dilution

WB~~1:2000

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RNF4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RNF4 Antibody - Protein Information

Name RNF4 {ECO:0000303|PubMed:15815621, ECO:0000312|HGNC:HGNC:10067}

Function E3 ubiquitin-protein ligase which binds polysumoylated chains covalently attached to proteins and mediates 'Lys-6'-, 'Lys-11'-, 'Lys- 48'- and 'Lys-63'-linked polyubiquitination of those substrates and their subsequent targeting to the proteasome for degradation (PubMed: 18408734, PubMed: 19307308, PubMed: 35013556). Regulates the degradation of several proteins including



PML and the transcriptional activator PEA3 (PubMed:18408734, PubMed:19307308, PubMed:20943951). Involved in chromosome alignment and spindle assembly, it regulates the kinetochore CENPH-CENPI-CENPK complex by targeting polysumoylated CENPI to proteasomal degradation (PubMed:20212317). Regulates the cellular responses to hypoxia and heat shock through degradation of respectively EPAS1 and PARP1 (PubMed:19779455, PubMed:20026589). Alternatively, it may also bind DNA/nucleosomes and have a more direct role in the regulation of transcription for instance enhancing basal transcription and steroid receptor-mediated transcriptional activation (PubMed:12885770). Catalyzes ubiquitination of sumoylated PARP1 in response to PARP1 trapping to chromatin, leading to PARP1 removal from chromatin by VCP/p97 (PubMed:35013556).

Cellular Location

Cytoplasm. Nucleus. Nucleus, PML body

Tissue Location

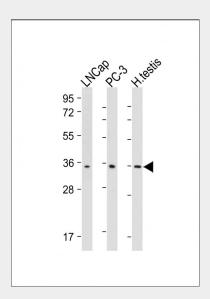
Widely expressed at low levels in many tissues; highly expressed in testis.

RNF4 Antibody - Protocols

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

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

RNF4 Antibody - Images



All lanes: Anti-RNF4 Antibody at 1:2000 dilution Lane 1: LNCap whole cell lysate Lane 2: PC-3 whole cell lysate Lane 3: Human testis tissue lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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RNF4 Antibody - Background

E3 ubiquitin-protein ligase which binds polysumoylated chains covalently attached to proteins and mediates 'Lys-6'-, 'Lys-11'-, 'Lys-48'- and 'Lys-63'-linked polyubiquitination of those substrates and their subsequent targeting to the proteasome for degradation. Regulates the degradation of several proteins including PML and the transcriptional activator PEA3. Involved in chromosome alignment and spindle assembly, it regulates the kinetochore CENPH-CENPI-CENPK complex by targeting polysumoylated CENPI to proteasomal degradation. Regulates the cellular responses to hypoxia and heat shock through degradation of respectively EPAS1 and PARP1. Alternatively, it may also bind DNA/nucleosomes and have a more direct role in the regulation of transcription for instance enhancing basal transcription and steroid receptor- mediated transcriptional activation.

RNF4 Antibody - References

Hadano S., et al. DNA Res. 5:177-186(1998). Chiariotti L., et al. Genomics 47:258-265(1998). Ota T., et al. Nat. Genet. 36:40-45(2004). Hillier L.W., et al. Nature 434:724-731(2005). Fedele M., et al.J. Biol. Chem. 275:7894-7901(2000).