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RNF4 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8684b

Product Information

Application	WB, E
Primary Accession	P78317
Reactivity	Human
Predicted	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	2055CT191.101.249
Calculated MW	21319

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 E~~Use at an assay dependent concentration.
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.

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.

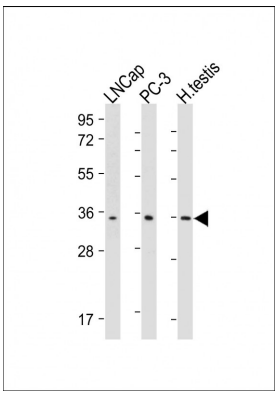
Background

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.

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).

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 µg 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.