

## **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

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.

## **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 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**

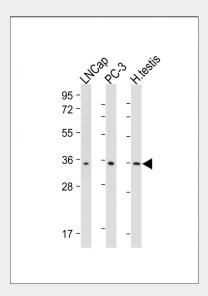
Widely expressed at low levels in many tissues; highly expressed in testis.

# **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>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- 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 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.



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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).