

Anti-RNF111 Antibody

Rabbit polyclonal antibody to RNF111 Catalog # AP60908

Specification

Anti-RNF111 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB <u>Q6ZNA4</u> <u>Q99ML9</u> Human, Mouse, Rat Rabbit Polyclonal 108862

Anti-RNF111 Antibody - Additional Information

Gene ID 54778

Other Names E3 ubiquitin-protein ligase Arkadia; RING finger protein 111

Target/Specificity Recognizes endogenous levels of RNF111 protein.

Dilution WB~~WB (1/500 - 1/1000)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-RNF111 Antibody - Protein Information

Name RNF111 (<u>HGNC:17384</u>)

Function

E3 ubiquitin-protein ligase (PubMed:26656854). Required for mesoderm patterning during embryonic development (By similarity). Acts as an enhancer of the transcriptional responses of the SMAD2/SMAD3 effectors, which are activated downstream of BMP (PubMed:14657019, PubMed:16601693). Acts by mediating ubiquitination and degradation of SMAD inhibitors such as SMAD7, inducing their proteasomal degradation and thereby enhancing the transcriptional activity of TGF-beta and BMP (PubMed:14657019,



PubMed:16601693). In addition to enhance transcription of SMAD2/SMAD3 effectors, also regulates their turnover by mediating their ubiquitination and subsequent degradation, coupling their activation with degradation, thereby ensuring that only effectors 'in use' are degraded (By similarity). Activates SMAD3/SMAD4-dependent transcription by triggering signal-induced degradation of SNON isoform of SKIL (PubMed:<a href="http://www.uniprot.org/citations/17591695"

target="_blank">17591695). Associates with UBE2D2 as an E2 enzyme (PubMed:22411132). Specifically binds polysumoylated chains via SUMO interaction motifs (SIMs) and mediates ubiquitination of sumoylated substrates (PubMed:23751493). Catalyzes 'Lys-63'-linked ubiquitination of sumoylated XPC in response to UV irradiation, promoting nucleotide excision repair (PubMed:23751493). Mediates ubiquitination and degradation of sumoylated PML (By similarity). The regulation of the BMP-SMAD signaling is however independent of sumoylation and is not dependent of SUMO interaction motifs

Cellular Location

(SIMs) (By similarity).

Nucleus. Cytoplasm Nucleus, PML body {ECO:0000250|UniProtKB:Q99ML9}. Note=Upon TGF-beta treatment, translocates from nucleus to cytosol

Tissue Location Broadly expressed..

Anti-RNF111 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>

Anti-RNF111 Antibody - Images



Western blot analysis of RNF111 expression in Hela (A), A549 (B), MCF7 (C), CT26 (D), PC12 (E)



whole cell lysates.

Anti-RNF111 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human RNF111. The exact sequence is proprietary.