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# Anti-RNF111 Antibody

Rabbit polyclonal antibody to RNF111
Catalog # AP60908

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q6ZNA4 |
| **Other Accession** | Q99ML9 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 108862 |

## Additional Information

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| **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 |

## Protein Information

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| **Name** | RNF111 ( HGNC:17384) |
| **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:17591695). Associates with UBE2D2 as an E2 enzyme (PubMed:22411132). Specifically binds polysumoylated chains via SUMO interaction motifs (SIMs) and mediates |

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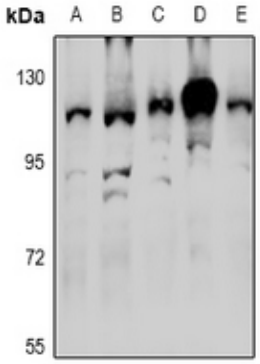
| | ubiquitination of sumoylated substrates (PubMed:23751493). Catalyzes 'Lys-63'-linked ubiquitination of sumoylated XPC in response to UV irradiation, promoting nucleotide excision repair (PubMed:23751493). Mediates ubiquitination and degradation of sumoylated PML (By similarity). The regulation of the BMP-SMAD signaling is however independent of sumoylation and is not dependent of SUMO interaction motifs (SIMs) (By similarity). |
| **Cellular Location** | Nucleus. Cytoplasm Nucleus, PML body {ECO:0000250\|UniProtKB:Q99ML9}. Note=Upon TGF-beta treatment, translocates from nucleus to cytosol |
| **Tissue Location** | Broadly expressed.. |

## Background

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

## Images




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