

## Rabbit RanBP2 Polyclonal Antibody | anti-RANBP2 antibody

RanBP2 Antibody

| CATALOG # | HOST   | REACTIVITY                                                                                                      | APPLICATIONS |
|-----------|--------|-----------------------------------------------------------------------------------------------------------------|--------------|
| AAA328957 | Rabbit | Human, Mouse, Rat<br>Predicted Reactivity: Pig(88%), Bovine(88%), Horse(88%), Sheep(88%), Rabbit(88%), Dog(88%) | ELISA        |

### PRODUCT SYNONYMS

RanBP2; Polyclonal Antibody; RanBP2 Antibody; 358 kDa nucleoporin; ANE1; E3 SUMO-protein ligase RanBP2; IIAE3; Nuclear pore complex protein Nup358; Nucleoporin 358; Nucleoporin Nup358; NUP358; p270; RAN binding protein 2; Ran-binding protein 2; RANBP2; RBP2\_HUMAN; Transformation related protein 2; TRP 1; TRP 2; TRP1; TRP2; anti-RANBP2 antibody

### PRODUCT SPECIFICATIONS

|                                                  |                                                                                                                          |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| Host                                             | Rabbit                                                                                                                   |
| Reactivity                                       | Human, Mouse, Rat<br>Predicted Reactivity: Pig(88%), Bovine(88%), Horse(88%), Sheep(88%), Rabbit(88%), Dog(88%)          |
| Clonality                                        | Polyclonal                                                                                                               |
| Isotype                                          | IgG                                                                                                                      |
| Specificity                                      | RanBP2 Antibody detects endogenous levels of total RanBP2.                                                               |
| Purity/Purification                              | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin (Thermo Fisher Scientific). |
| Form/Format                                      | Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol                  |
| Concentration                                    | 1mg/ml (varies by lot)                                                                                                   |
| Sequence Length                                  | 3224                                                                                                                     |
| Applicable Applications for anti-RANBP2 antibody | ELISA                                                                                                                    |
| Immunogen                                        | A synthesized peptide derived from human RanBP2, corresponding to a region within C-terminal amino acids.                |
| Fragment                                         | Fab fragment                                                                                                             |
| Preparation and Storage                          | Store at -20 degree C. Stable for 12 months from date of receipt.                                                        |

### IMAGES



#### IF (Immunofluorescence)

AAA328957 staining HepG2 cells by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25Å°C. Samples were then incubated with primary Ab(AAA328957 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37Å°C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI(blue).



#### WB (Western Blot)

Western blot analysis of extracts from HeLa cells, using RanBP2 Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

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|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-RANBP2 antibody | <p>Function: E3 SUMO-protein ligase which facilitates SUMO1 and SUMO2 conjugation by UBE2I (PubMed:11792325, PubMed:12032081, PubMed:15378033, PubMed:22194619, PubMed:15931224). Involved in transport factor (Ran-GTP, karyopherin)-mediated protein import via the F-G repeat-containing domain which acts as a docking site for substrates (PubMed:7775481). Binds single-stranded RNA (in vitro) (PubMed:7775481). May bind DNA (PubMed:7775481). Component of the nuclear export pathway (PubMed:10078529). Specific docking site for the nuclear export factor exportin-1 (PubMed:10078529). Sumoylates PML at 'Lys-490' which is essential for the proper assembly of PML-NB (PubMed:22155184). Recruits BICD2 to the nuclear envelope and cytoplasmic stacks of nuclear pore complex known as annulate lamellae during G2 phase of cell cycle (PubMed:20386726). Probable inactive PPIase with no peptidyl-prolyl cis-trans isomerase activity (PubMed:20676357, PubMed:23353830).</p> <p>Post Translational Modifications: Polyubiquitinated by PRKN, which leads to proteasomal degradation.The inner channel of the NPC has a different redox environment from the cytoplasm and allows the formation of interchain disulfide bonds between some nucleoporins, the significant increase of these linkages upon oxidative stress reduces the permeability of the NPC.</p> <p>Subcellular Location: Nucleus. Nucleus membrane. Nucleus&gt;Nuclear pore complex. Nucleus envelope. Note: Detected in diffuse and discrete intranuclear foci (PubMed:11839768). Cytoplasmic filaments (PubMed:7775481).</p> <p>Subunit Structure: Forms a complex with NXT1, NXF1 and RANGAP1 (PubMed:14729961). Forms a tight complex with RANBP1 and UBE2I (PubMed:15388847, PubMed:10078529, PubMed:15826666). Interacts with SUMO1 but not SUMO2 (PubMed:15388847, PubMed:10078529, PubMed:15826666). Interacts with PRKN (PubMed:16332688). Interacts with sumoylated RANGAP1 (PubMed:15378033, PubMed:10078529, PubMed:15826666). Interacts with CDCA8 (PubMed:19413330). Interacts with PML (isoform PML-4) (PubMed:22155184). Interacts with BICD2 (PubMed:20386726). Interacts with MCM3AP isoform GANP (PubMed:20005110).</p> <p>Similarity: Contains FG repeats. FG repeats are interaction sites for karyopherins (importins, exportins) and form probably an affinity gradient, guiding the transport proteins unidirectionally with their cargo through the NPC. FG repeat regions are highly flexible and lack ordered secondary structure. The overall conservation of FG repeats regarding exact sequence, spacing, and repeat unit length is limited.The PPIase cyclophilin-type domain has high structural similarity with PPIA, but has extremely low and barely detectable proline isomerase activity (in vitro) (PubMed:23353830). Only about half of the residues that surround the PPIA active site cleft are conserved.Belongs to the RanBP2 E3 ligase family.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                |
|----------------------------------|------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 150418007                                                                                      |
| NCBI GeneID                      | 5903                                                                                           |
| NCBI Accession #                 | NP_006258.3                                                                                    |
| NCBI GenBank Nucleotide #        | NP_006258.3                                                                                    |
| UniProt Accession #              | P49792                                                                                         |
| Molecular Weight                 | Observed Molecular Weight: (Observed)358kD.<br>Predicted Molecular Weight: (Calculated)358kDa. |
| NCBI Official Full Name          | E3 SUMO-protein ligase RanBP2                                                                  |
| NCBI Official Synonym Full Names | RAN binding protein 2                                                                          |
| NCBI Official Symbol             | RANBP2                                                                                         |
| NCBI Official Synonym Symbols    | ANE1; TRP1; TRP2; ADANE; IIAE3; NUP358                                                         |
| NCBI Protein Information         | E3 SUMO-protein ligase RanBP2                                                                  |
| UniProt Protein Name             | E3 SUMO-protein ligase RanBP2                                                                  |
| UniProt Gene Name                | RANBP2                                                                                         |
| UniProt Synonym Gene Names       | NUP358; RanBP2                                                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ranbp2-antibody-elisa/328957>