10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# RanBP3 Recombinant Rabbit mAb

Catalog # AP100272

## Product Information

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| **Application** | IHC-P, IHC-F, IF, IP |
| **Primary Accession** | Q9H6Z4 |
| **Other Accession** | Q9H6Z4 |
| **Reactivity** | Rat, Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Recombinant |
| **Calculated MW** | 60210 |
| **Physical State** | Liquid |
| **Immunogen** | A synthesized peptide derived from human RanBP3 |
| **Epitope Specificity** | 16-65 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 10mM phosphate buffered saline(pH 7.4) with 150mM sodium chloride, 0.05% BSA, 0.02% Proclin300 and 50% glycerol. |
| **SIMILARITY** | Contains 1 RanBD1 domain. |
| **SUBUNIT** | Interacts with CHC1 in a Ran-stimulated manner. Interacts with XPO1. Interacts (via its C-terminal R domain) with SMAD2 (dephosphorylated form via its MH1 and MH2 domains); the interaction results in the nuclear export of SMAD2 and termination of the TGF-beta signaling. Interacts (via its C-terminal R domain) with SMAD3 (dephosphorylated form via its MH1 domain); the interaction results in the nuclear export of SMAD3 and termination of the TGF-beta signaling. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Acts as a cofactor for XPO1/CRM1-mediated nuclear export, perhaps as export complex scaffolding protein. Bound to XPO1/CRM1, stabilizes the XPO1/CRM1-cargo interaction. In the absence of Ran-bound GTP prevents binding of XPO1/CRM1 to the nuclear pore complex. Binds to CHC1/RCC1 and increases the guanine nucleotide exchange activity of CHC1/RCC1. Recruits XPO1/CRM1 to CHC1/RCC1 in a Ran-dependent manner. |

## Additional Information

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| **Gene ID** | 8498 |
| **Other Names** | 2610024N24Rik; RANB3_HUMAN; RANBP3; RANB3_MOUSE; RAN binding protein 3 |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:50-200,IF=1:100-500,IP=1:20-50,Flow-Cyt=1:50-100 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody |

is stable for at least two weeks at 2-4 °C.

## Protein Information

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| **Name** | RANBP3 |
| **Function** | Acts as a cofactor for XPO1/CRM1-mediated nuclear export, perhaps as export complex scaffolding protein. Bound to XPO1/CRM1, stabilizes the XPO1/CRM1-cargo interaction. In the absence of Ran-bound GTP prevents binding of XPO1/CRM1 to the nuclear pore complex. Binds to CHC1/RCC1 and increases the guanine nucleotide exchange activity of CHC1/RCC1. Recruits XPO1/CRM1 to CHC1/RCC1 in a Ran-dependent manner. Negative regulator of TGF-beta signaling through interaction with the R-SMAD proteins, SMAD2 and SMAD3, and mediating their nuclear export. |
| **Cellular Location** | Cytoplasm. Nucleus. Note=Nuclear import is promoted by phosphorylation at Ser-126 and is dependent on KPNA4. |
| **Tissue Location** | Widely expressed with high levels in testis and heart. |

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