

## Anti-RIP2 Rabbit Monoclonal Antibody Catalog # ABO16631

### Specification

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#### Anti-RIP2 Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	<a href="#">O43353</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-RIP2 Rabbit Monoclonal Antibody . Tested in WB applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-RIP2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 8767

#### Other Names

Receptor-interacting serine/threonine-protein kinase 2, 2.7.11.1, CARD-containing interleukin-1 beta-converting enzyme-associated kinase, CARD-containing IL-1 beta ICE-kinase, RIP-like-interacting CLARP kinase, Receptor-interacting protein 2, RIP-2, Tyrosine-protein kinase RIPK2, 2.7.10.2, RIPK2 {ECO:0000303|PubMed:30026309, ECO:0000312|HGNC:HGNC:10020}

#### Application Details

WB 1:500-1:2000

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human RIP2

#### Purification

Affinity-chromatography

#### Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

#### Anti-RIP2 Rabbit Monoclonal Antibody - Protein Information

**Name** RIPK2 {ECO:0000303|PubMed:30026309, ECO:0000312|HGNC:HGNC:10020}

## Function

Serine/threonine/tyrosine-protein kinase that plays an essential role in modulation of innate and adaptive immune responses (PubMed:<a href="http://www.uniprot.org/citations/14638696" target="\_blank">14638696</a>, PubMed:<a href="http://www.uniprot.org/citations/17054981" target="\_blank">17054981</a>, PubMed:<a href="http://www.uniprot.org/citations/21123652" target="\_blank">21123652</a>, PubMed:<a href="http://www.uniprot.org/citations/28656966" target="\_blank">28656966</a>, PubMed:<a href="http://www.uniprot.org/citations/9575181" target="\_blank">9575181</a>, PubMed:<a href="http://www.uniprot.org/citations/9642260" target="\_blank">9642260</a>). Acts as a key effector of NOD1 and NOD2 signaling pathways: upon activation by bacterial peptidoglycans, NOD1 and NOD2 oligomerize and recruit RIPK2 via CARD-CARD domains, leading to the formation of RIPK2 filaments (PubMed:<a href="http://www.uniprot.org/citations/17054981" target="\_blank">17054981</a>, PubMed:<a href="http://www.uniprot.org/citations/17562858" target="\_blank">17562858</a>, PubMed:<a href="http://www.uniprot.org/citations/21123652" target="\_blank">21123652</a>, PubMed:<a href="http://www.uniprot.org/citations/22607974" target="\_blank">22607974</a>, PubMed:<a href="http://www.uniprot.org/citations/28656966" target="\_blank">28656966</a>, PubMed:<a href="http://www.uniprot.org/citations/29452636" target="\_blank">29452636</a>, PubMed:<a href="http://www.uniprot.org/citations/30026309" target="\_blank">30026309</a>). Once recruited, RIPK2 autophosphorylates and undergoes 'Lys-63'-linked polyubiquitination by E3 ubiquitin ligases XIAP, BIRC2 and BIRC3, as well as 'Met-1'-linked (linear) polyubiquitination by the LUBAC complex, becoming a scaffolding protein for downstream effectors (PubMed:<a href="http://www.uniprot.org/citations/22607974" target="\_blank">22607974</a>, PubMed:<a href="http://www.uniprot.org/citations/28545134" target="\_blank">28545134</a>, PubMed:<a href="http://www.uniprot.org/citations/29452636" target="\_blank">29452636</a>, PubMed:<a href="http://www.uniprot.org/citations/30026309" target="\_blank">30026309</a>, PubMed:<a href="http://www.uniprot.org/citations/30279485" target="\_blank">30279485</a>, PubMed:<a href="http://www.uniprot.org/citations/30478312" target="\_blank">30478312</a>). 'Met-1'-linked polyubiquitin chains attached to RIPK2 recruit IKBKG/NEMO, which undergoes 'Lys-63'-linked polyubiquitination in a RIPK2-dependent process (PubMed:<a href="http://www.uniprot.org/citations/17562858" target="\_blank">17562858</a>, PubMed:<a href="http://www.uniprot.org/citations/22607974" target="\_blank">22607974</a>, PubMed:<a href="http://www.uniprot.org/citations/29452636" target="\_blank">29452636</a>, PubMed:<a href="http://www.uniprot.org/citations/30026309" target="\_blank">30026309</a>). 'Lys-63'-linked polyubiquitin chains attached to RIPK2 serve as docking sites for TAB2 and TAB3 and mediate the recruitment of MAP3K7/TAK1 to IKBKG/NEMO, inducing subsequent activation of IKBKB/IKK (PubMed:<a href="http://www.uniprot.org/citations/18079694" target="\_blank">18079694</a>). In turn, NF-kappa-B is released from NF-kappa-B inhibitors and translocates into the nucleus where it activates the transcription of hundreds of genes involved in immune response, growth control, or protection against apoptosis (PubMed:<a href="http://www.uniprot.org/citations/18079694" target="\_blank">18079694</a>). The protein kinase activity is dispensable for the NOD1 and NOD2 signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/29452636" target="\_blank">29452636</a>, PubMed:<a href="http://www.uniprot.org/citations/30026309" target="\_blank">30026309</a>). Contributes to the tyrosine phosphorylation of the guanine exchange factor ARHGEF2 through Src tyrosine kinase leading to NF-kappa-B activation by NOD2 (PubMed:<a href="http://www.uniprot.org/citations/21887730" target="\_blank">21887730</a>). Also involved in adaptive immunity: plays a role during engagement of the T-cell receptor (TCR) in promoting BCL10 phosphorylation and subsequent NF-kappa-B activation (PubMed:<a href="http://www.uniprot.org/citations/14638696" target="\_blank">14638696</a>). Plays a role in the inactivation of RHOA in response to NGFR signaling (PubMed:<a href="http://www.uniprot.org/citations/26646181" target="\_blank">26646181</a>).

## Cellular Location

Cytoplasm. Cell membrane; Peripheral membrane protein. Endoplasmic reticulum. Note=Recruited to the cell membrane by NOD2 following stimulation by bacterial peptidoglycans

## Tissue Location

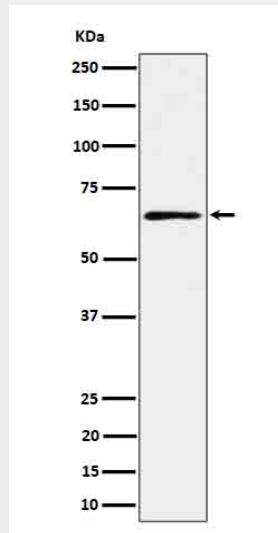
Detected in heart, brain, placenta, lung, peripheral blood leukocytes, spleen, kidney, testis, prostate, pancreas and lymph node.

### Anti-RIP2 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-RIP2 Rabbit Monoclonal Antibody - Images



Western blot analysis of RIP2 in K562 cell lysate.