

RIP2 Antibody
Rabbit mAb
Catalog # AP93106

Specification

RIP2 Antibody - Product Information

Application	WB
Primary Accession	O43353
Reactivity	Rat
Clonality	Monoclonal
Other Names	
CARD carrying kinase; CARD3; CARDIAK; CCK; CLARP kinase; GIG30; Growth inhibiting gene 30; Receptor interacting protein 2; RICK; RIP 2; Ripk2; TNFRSF;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	61195 Da

RIP2 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human RIP2
Description	Activates pro-caspase-1 and pro-caspase-8. Potentiates CASP8-mediated apoptosis. Activates NF-kappa-B.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

RIP2 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: [14638696](http://www.uniprot.org/citations/14638696) target="_blank">14638696, PubMed: [17054981](http://www.uniprot.org/citations/17054981) target="_blank">17054981, PubMed: [21123652](http://www.uniprot.org/citations/21123652) target="_blank">21123652, PubMed: [28656966](http://www.uniprot.org/citations/28656966) target="_blank">28656966, PubMed: [9575181](http://www.uniprot.org/citations/9575181) target="_blank">9575181, PubMed: [9642260](http://www.uniprot.org/citations/9642260) target="_blank">9642260). 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: [17054981](http://www.uniprot.org/citations/17054981) target="_blank">17054981, PubMed: [17054981](http://www.uniprot.org/citations/17054981) target="_blank">17054981).

href="http://www.uniprot.org/citations/17562858" target="_blank">17562858, PubMed:21123652, PubMed:22607974, PubMed:28656966, PubMed:29452636, PubMed:30026309). 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:22607974, PubMed:28545134, PubMed:29452636, PubMed:30026309, PubMed:30279485, PubMed:30478312). 'Met-1'-linked polyubiquitin chains attached to RIPK2 recruit IKBKG/NEMO, which undergoes 'Lys-63'-linked polyubiquitination in a RIPK2-dependent process (PubMed:17562858, PubMed:22607974, PubMed:29452636, PubMed:30026309). '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/IKKB (PubMed:18079694). 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:18079694). The protein kinase activity is dispensable for the NOD1 and NOD2 signaling pathways (PubMed:29452636, PubMed:30026309). Contributes to the tyrosine phosphorylation of the guanine exchange factor ARHGEF2 through Src tyrosine kinase leading to NF-kappa-B activation by NOD2 (PubMed:21887730). 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:14638696). Plays a role in the inactivation of RHOA in response to NGFR signaling (PubMed:26646181).

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.

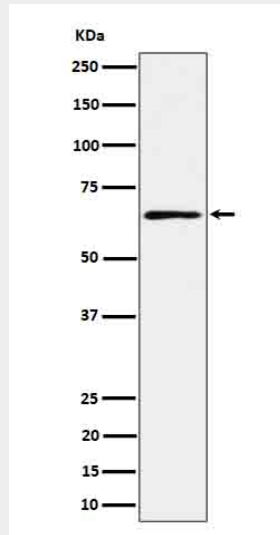
RIP2 Antibody - Protocols

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](#)

RIP2 Antibody - Images



Western blot analysis of RIP2 in K562 cell lysate.