

## ARG55746 anti-RIPK1 / RIP1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes RIPK1 / RIP1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	RIPK1 / RIP1
Species	Human
Immunogen	Synthetic peptide (15 aa) within aa. 180-230 of Human RIPK1 / RIP1.
Conjugation	Un-conjugated
Alternate Names	Receptor-interacting protein 1; RIP-1; Receptor-interacting serine/threonine-protein kinase 1; RIP; Cell death protein RIP; RIP1; EC 2.7.11.1; Serine/threonine-protein kinase RIP

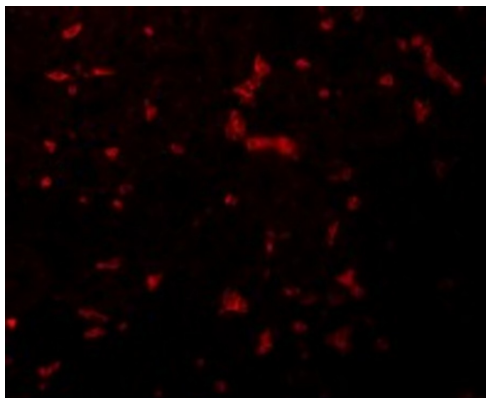
### Application Instructions

Application table	Application	Dilution
	ICC/IF	20 µg/ml
	WB	1 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	Rat Kidney Tissue Lysate	

### Properties

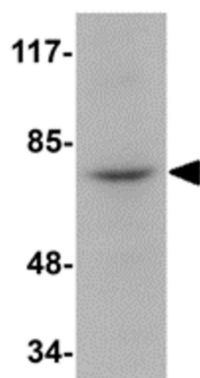
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Database links	<p><a href="#">GeneID: 19766 Mouse</a></p> <p><a href="#">GeneID: 8737 Human</a></p> <p><a href="#">Swiss-port # Q13546 Human</a></p> <p><a href="#">Swiss-port # Q60855 Mouse</a></p>
Gene Symbol	RIPK1
Gene Full Name	receptor (TNFRSF)-interacting serine-threonine kinase 1
Background	RIPK1 / RIP1 is a member of the receptor-interacting protein (RIP) family of serine/threonine protein kinases. The encoded protein plays a role in inflammation and cell death in response to tissue damage, pathogen recognition, and as part of developmental regulation. RIPK1/RIPK3 kinase-mediated necrosis is referred to as necroptosis. Genetic disruption of this gene in mice results in death shortly after birth. [provided by RefSeq, Aug 2017]
Function	RIPK1 / RIP1: Serine-threonine kinase which is a key regulator of both cell death and cell survival (PubMed:25459879). Exhibits kinase activity-dependent functions that trigger cell death and kinase-independent scaffold functions regulating inflammatory signaling and cell survival (PubMed:11101870, PubMed:25459879). Initiates ripoptocide which describes cell death that is dependent on RIPK1, be it apoptosis or necroptosis (PubMed:31457011). Upon binding of TNF to TNFR1, RIPK1 is recruited to the TNF-R1 signaling complex (TNF-RSC also known as complex I) where it acts as a scaffold protein promoting cell survival, in part, by activating the canonical NF-kB pathway. Specific conditions can however activate RIPK1, and its kinase activity then regulates assembly of two death-inducing complexes, namely complex IIa (RIPK1-FADD-CASP8) and the complex IIb (RIPK1-RIPK3-MLKL) and these complexes respectively drive apoptosis or necroptosis, a regulated form of necrosis (PubMed:19524513, PubMed:19524512, PubMed:29440439, PubMed:30988283). During embryonic development suppresses apoptosis and necroptosis and prevents the interaction of TRADD with FADD thereby limiting aberrant activation of CASP8. Phosphorylates DAB2IP at 'Ser-728' in a TNF- alpha-dependent manner, and thereby activates the MAP3K5-JNK apoptotic cascade (PubMed:17389591). Required for ZBP1-induced NF-kappaB activation and activation of NF-kappaB by DNA damage and IR. [UniProt]
Highlight	<p>Related Antibody Duos and Panels:  <a href="#">ARG30344 Necrosome Antibody Panel</a></p> <p>Related products:  <a href="#">RIPK1 antibodies; RIPK1 Duos / Panels; Anti-Rabbit IgG secondary antibodies;</a></p> <p>Related news:  <a href="#">A non-autophagic role of Atg9a in necrosis and developmental bone formation</a>  <a href="#">RIP1 activation and pathogenesis of NASH</a>  <a href="#">Ripoptosome &amp; Necrosome antibody panels are launched</a></p>
Calculated Mw	76 kDa
PTM	<p>Proteolytically cleaved by caspase-8 during TNF-induced apoptosis. Cleavage abolishes NF-kappa-B activation and enhances pro-apoptotic signaling through the TRADD-FADD interaction. RIPK1 and RIPK3 undergo reciprocal auto- and trans-phosphorylation. Phosphorylation of Ser-161 by RIPK3 is necessary for the formation of the necroptosis-inducing complex. Ubiquitinated by 'Lys-11'-, 'Lys-48'-, 'Lys-63'- and linear-linked type ubiquitin. Polyubiquitination with 'Lys-63'-linked chains by TRAF2 induces association with the IKK complex. Deubiquitination of 'Lys-63'-linked chains and polyubiquitination with 'Lys-48'-linked chains by TNFAIP3 leads to RIPK1 proteasomal degradation and consequently down-regulates TNF-alpha-induced NFkappa-B signaling. 'Lys-48'-linked polyubiquitination by RFFL or RNF34 also promotes proteasomal degradation and negatively regulates TNF-alpha-induced NFkappa-B signaling. Linear polyubiquitinated; the head-to-tail polyubiquitination is mediated by the LUBAC complex. LPS-mediated activation of NF-kappa-B. Also ubiquitinated with 'Lys-11'-linked chains. Polyubiquitinated with 'Lys-48' and 'Lys-63'-linked chains by BIRC2/c-IAP1 and BIRC3/c-IAP2, leading to activation of NF-kappa-B.</p>



ARG55746 anti-RIPK1 / RIP1 antibody ICC/IF image

Immunofluorescence: Mouse Kidney cells stained with ARG55746 anti-RIPK1 / RIP1 antibody at 20  $\mu\text{g}/\text{ml}$  dilution.



ARG55746 anti-RIPK1 / RIP1 antibody WB image

Western blot: Rat kidney tissue lysate stained with ARG55746 anti-RIPK1 / RIP1 antibody at 1  $\mu\text{g}/\text{ml}$  dilution.