

## ARG66476 anti-RIPK1 / RIP1 phospho (Ser166) antibody [YJY-1-5]

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Monoclonal antibody [YJY-1-5] recognizes RIPK1 / RIP1 phospho (Ser166)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-Fr, IHC-P, IP, WB
Host	Rabbit
Clonality	Monoclonal
Clone	YJY-1-5
Isotype	IgG
Target Name	RIPK1 / RIP1
Species	Mouse
Immunogen	Phosphospecific peptide around Ser166 of Mouse 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	1:100 - 1:500
	IHC-Fr	1:100 - 1:500
	IHC-P	1:100 - 1:500
	IP	1:50 - 1:500
	WB	1:1000 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Citrate buffer (pH 6.0) at high pressure and temperature. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

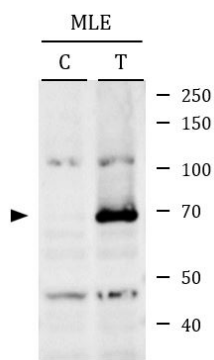
### Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.01% Sodium azide, 40% Glycerol and BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and BSA

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. 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.

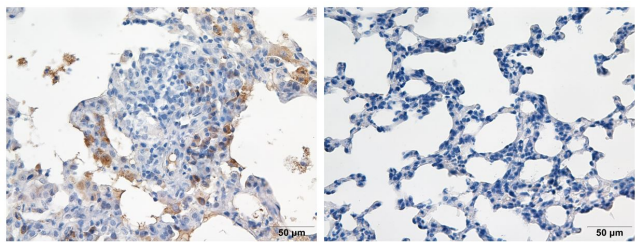
## Bioinformation

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	Related products: <a href="#">RIPK1 antibodies</a> ; <a href="#">RIPK1 Duos / Panels</a> ; <a href="#">Anti-Rabbit IgG secondary antibodies</a> ; Related news: <a href="#">RIP1 activation and pathogenesis of NASH</a> <a href="#">Ripoptosome &amp; Necrosome antibody panels are launched</a> <a href="#">RIP1 pSer166 antibody good for human and mouse samples</a>
Calculated Mw	76 kDa
PTM	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. [UniProt]
Cellular Localization	Cytoplasm. Cell membrane. [UniProt]



ARG66476 anti-RIPK1 / RIP1 phospho (Ser166) antibody [YJY-1-5]  
WB image

Western blot: MLE cells untreated control (C) or treated with 20 ng/ml of TNF alpha, 1 μM of BV-6 and 20 μM of Z-VAD-FMK for 8 hours (T). Cell lysates were stained with ARG66476 anti-RIPK1 / RIP1 phospho (Ser166) antibody [YJY-1-5].



ARG66476 anti-RIPK1 / RIP1 phospho (Ser166) antibody [YJY-1-5]  
IHC-P image

Immunohistochemistry: Paraffin-embedded rat lung tissue from rat silicosis model. Antigen Retrieval: Citrate buffer (pH 6.0) at high pressure and temperature. The tissue section was stained with ARG66476 anti-RIPK1 / RIP1 phospho (Ser166) antibody [YJY-1-5] at 1:70 dilution. The picture on the right is negative control.