

Anti-Phospho-RIP3 (S232) Rabbit Monoclonal Antibody
Catalog # ABO16665**Specification****Anti-Phospho-RIP3 (S232) Rabbit Monoclonal Antibody - Product Information**

Application	WB
Primary Accession	Q9Y572
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Phospho-RIP3 (S232) Rabbit Monoclonal Antibody . Tested in WB applications. This antibody reacts with Mouse.

Anti-Phospho-RIP3 (S232) Rabbit Monoclonal Antibody - Additional Information

Gene ID 11035

Other Names

Receptor-interacting serine/threonine-protein kinase 3, 2.7.11.1, RIP-like protein kinase 3, Receptor-interacting protein 3, RIP-3, RIPK3 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=10021)
HGNC:10021

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 Phospho-RIP3 (S232)

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-Phospho-RIP3 (S232) Rabbit Monoclonal Antibody - Protein Information

Name RIPK3 ([HGNC:10021](#))

Function

Serine/threonine-protein kinase that activates necroptosis and apoptosis, two parallel forms of cell death (PubMed:<a href="http://www.uniprot.org/citations/19524512"

target="_blank">19524512, PubMed:<a href="http://www.uniprot.org/citations/19524513"

target="_blank">19524513, PubMed:<a href="http://www.uniprot.org/citations/22265413"

target="_blank">22265413, PubMed:<a href="http://www.uniprot.org/citations/22265414"

target="_blank">22265414, PubMed:<a href="http://www.uniprot.org/citations/22421439"

target="_blank">22421439, PubMed:<a href="http://www.uniprot.org/citations/29883609"

target="_blank">29883609, PubMed:<a href="http://www.uniprot.org/citations/32657447"

target="_blank">32657447). Necroptosis, a programmed cell death process in response to

death-inducing TNF-alpha family members, is triggered by RIPK3 following activation by ZBP1

(PubMed:19524512,

PubMed:19524513,

PubMed:22265413,

PubMed:22265414,

PubMed:22421439,

PubMed:29883609,

PubMed:32298652).

Activated RIPK3 forms a necrosis- inducing complex and mediates phosphorylation of MLKL,

promoting MLKL localization to the plasma membrane and execution of programmed necrosis

characterized by calcium influx and plasma membrane damage (PubMed:19524512, PubMed:19524513, PubMed:22265413, PubMed:22265414, PubMed:22421439, PubMed:25316792, PubMed:29883609). In addition to

TNF- induced necroptosis, necroptosis can also take place in the nucleus in response to

orthomyxoviruses infection: following ZBP1 activation, which senses double-stranded Z-RNA

structures, nuclear RIPK3 catalyzes phosphorylation and activation of MLKL, promoting disruption

of the nuclear envelope and leakage of cellular DNA into the cytosol (By similarity). Also regulates

apoptosis: apoptosis depends on RIPK1, FADD and CASP8, and is independent of MLKL and RIPK3

kinase activity (By similarity). Phosphorylates RIPK1: RIPK1 and RIPK3 undergo reciprocal auto-

and trans-phosphorylation (PubMed:<a href="http://www.uniprot.org/citations/19524513"

target="_blank">19524513). In some cell types, also able to restrict viral replication by

promoting cell death- independent responses (By similarity). In response to Zika virus infection in

neurons, promotes a cell death-independent pathway that restricts viral replication: together with

ZBP1, promotes a death- independent transcriptional program that modifies the cellular

metabolism via up-regulation expression of the enzyme ACOD1/IRG1 and production of the

metabolite itaconate (By similarity). Itaconate inhibits the activity of succinate dehydrogenase,

generating a metabolic state in neurons that suppresses replication of viral genomes (By

similarity). RIPK3 binds to and enhances the activity of three metabolic enzymes: GLUL, GLUD1,

and PYGL (PubMed:<a href="http://www.uniprot.org/citations/19498109"

target="_blank">19498109). These metabolic enzymes may eventually stimulate the

tricarboxylic acid cycle and oxidative phosphorylation, which could result in enhanced ROS

production (PubMed:<a href="http://www.uniprot.org/citations/19498109"

target="_blank">19498109).

Cellular Location

Cytoplasm, cytosol. Nucleus {ECO:0000250|UniProtKB:Q9QZL0}. Note=Mainly cytoplasmic

Present in the nucleus in response to influenza A virus (IAV) infection.

{ECO:0000250|UniProtKB:Q9QZL0}

Tissue Location

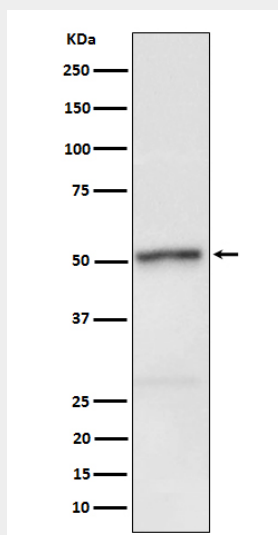
Highly expressed in the pancreas. Detected at lower levels in heart, placenta, lung and kidney

Anti-Phospho-RIP3 (S232) 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-Phospho-RIP3 (S232) Rabbit Monoclonal Antibody - Images



Western blot analysis of Phospho-RIP3 (S232) expression in L929 cell lysate.