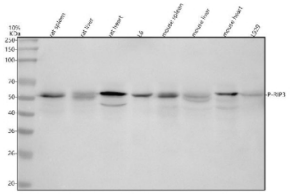
Phospho-RIP3 (pSer232) Antibody / RIPK3 [clone 31R36] (FY13346)

Catalog No.	Formulation	Size
FY13346	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	2-3 weeks
Species Reactivity	Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31R36
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q9Y572
Applications	Western Blot : 1:500-1:2000
Limitations	This Phospho-RIP3 (pSer232) antibody is available for research use only.



Western blot analysis of Phospho-RIP3 (S232) using anti-Phospho-RIP3 (pS232) antibody. Lane 1: rat spleen tissue lysates, Lane 2: rat liver tissue lysates, Lane 3: rat heart tissue lysates, Lane 4: rat L6 whole cell lysates, Lane 5: mouse spleen tissue lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse heart tissue lysates, Lane 8: mouse L929 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Phospho-RIP3 (S232) antibody (S232) at 1:500 overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. The expected molecular weight of Phospho-RIP3 (S232) is at 50 kDa.

Description

Phospho-RIP3 (pSer232) antibody detects RIP3 phosphorylated at serine 232, encoded by the RIPK3 gene. RIP3, also called Receptor interacting serine threonine kinase 3, is a critical mediator of necroptosis, a regulated form of necrotic cell death. Phospho-RIP3 (pSer232) antibody provides researchers with a specific reagent to study necroptotic signaling, inflammation, and disease mechanisms involving programmed necrosis.

RIP3 functions as a core signaling kinase within the necrosome complex. Research using Phospho-RIP3 (pSer232) antibody has shown that phosphorylation at Ser232 is essential for RIP3 activation and subsequent recruitment of MLKL, the executioner protein of necroptosis. This phosphorylation serves as a molecular switch controlling progression of the necroptotic pathway.

Studies with Phospho-RIP3 (pSer232) antibody have revealed that necroptosis is triggered by tumor necrosis factor signaling, viral infection, and cellular stress conditions. RIP3 phosphorylation at Ser232 enables necrosome assembly, MLKL oligomerization, and disruption of plasma membrane integrity. This process releases intracellular contents that amplify inflammation and immune responses.

In disease contexts, dysregulated necroptosis contributes to pathology. Research using Phospho-RIP3 (pSer232) antibody has shown that excessive activation promotes tissue damage in conditions such as ischemia reperfusion injury, inflammatory bowel disease, and neurodegeneration. Conversely, insufficient necroptosis facilitates viral persistence and impaired immune clearance. These findings highlight RIP3 phosphorylation as a therapeutic target for modulating necroptotic signaling.

Phospho-RIP3 (pSer232) antibody is widely applied in western blotting, immunohistochemistry, and immunofluorescence. Western blotting distinguishes phosphorylated RIP3 from total levels, immunohistochemistry localizes activated necroptotic signaling in tissue, and immunofluorescence reveals subcellular distribution during necrosome formation. These applications make the antibody valuable in cell death research.

By providing validated Phospho-RIP3 (pSer232) antibody reagents, NSJ Bioreagents supports studies into programmed necrosis, inflammation, and therapeutic modulation. Detection of RIP3 phosphorylated at Ser232 provides insight into the molecular regulation of necroptosis and its contribution to disease.

Application Notes

Optimal dilution of the Phospho-RIP3 (pSer232) antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Phospho-RIP3 (S232) was used as the immunogen for the Phospho-RIP3 (pSer232) antibody.

Storage

Store the Phospho-RIP3 (pSer232) antibody at -20oC.