

Mouse Anti-RIPK3 antibody

SLM-51714M

Product Name	RIPK3
Chinese Name	受体结合丝氨酸苏氨酸激酶 3 单克隆抗体
Alias	Receptor interacting protein 3; Receptor interacting serine threonine kinase 3; Receptor interacting serine/threonine protein kinase 3; Receptor-interacting protein 3; Receptor-interacting serine/threonine-protein kinase 3; RIP 3; RIP like protein kinase 3; RIP-3; RIP-like protein kinase 3; RIPK 3; RIPK3_HUMAN.
Research Area	Tumour Cell biology immunology Neurobiology Signal transduction Apoptosis transcriptional regulatory factor
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	D11F6
React Species	Human, WB=1:500-1000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	57kDa
Cellular localization	cytoplasmic The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	Recombinant human RIPK3.
Lsotype	IgG1, κ
Purification	affinity purified by Protein G
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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The product of this gene is a member of the receptor-interacting protein (RIP) family of serine/threonine protein kinases, and contains a C-terminal domain unique from other RIP family members. The encoded protein is predominantly localized to the cytoplasm, and can undergo nucleocytoplasmic shuttling dependent on novel nuclear localization and export signals. It is a component of the tumor necrosis factor (TNF) receptor-I signaling complex, and can induce apoptosis and weakly activate the NF-kappaB transcription factor. [provided by RefSeq, Jul 2008]

Function:

Essential for programmed necrosis in response to death-inducing TNF-alpha family members. Upon induction of necrosis, RIPK3 interacts with, and phosphorylates RIPK1 to form a necrosis-inducing complex. RIPK3 binds to and enhances the activity of three metabolic enzymes: GLUL, GLUD1, and PYGL. These metabolic enzymes may eventually stimulate the tricarboxylic acid cycle and oxidative phosphorylation, which could result in enhanced ROS production.

Subunit:

Interacts (via RIP homotypic interaction motif) with RIPK1 (via RIP homotypic interaction motif); this interaction induces RIPK1 phosphorylation and formation of a RIPK1-RIPK3 necrosis-inducing complex. Upon TNF-induced necrosis, the RIPK1-RIPK3 dimer further interacts with PGAM5 and MLKL; the formation of this complex leads to PGAM5 phosphorylation and increase in PGAM5 phosphatase activity. Binds TRAF2 and is recruited to the TNFR-1 signaling complex. Interacts with PYGL, GLUL and GLUD1; these interactions result in activation of these metabolic enzymes. Interacts with BIRC2/c-IAP1, BIRC3/c-IAP2 and XIAP/BIRC4.

Subcellular Location:

Cytoplasm. Cell membrane. Mitochondrion (Potential).

Tissue Specificity:

Highly expressed in the pancreas. Detected at lower levels in heart, placenta, lung and kidney. Isoform 3 is significantly increased in colon and lung cancers.

Post-translational modifications:

RIPK1 and RIPK3 undergo reciprocal auto- and trans-phosphorylation. Phosphorylation of Ser-199 plays a role in the necroptotic function of RIPK3. Polyubiquitinated with 'Lys-48' and 'Lys-63'-linked chains by BIRC2/c-IAP1 and BIRC3/c-IAP2, leading to activation of NF-kappa-B.

Product Detail

Similarity:

Belongs to the protein kinase superfamily. TKL Ser/Thr protein kinase family.
Contains 1 protein kinase domain.

SWISS:

Q9Y572

Gene ID:

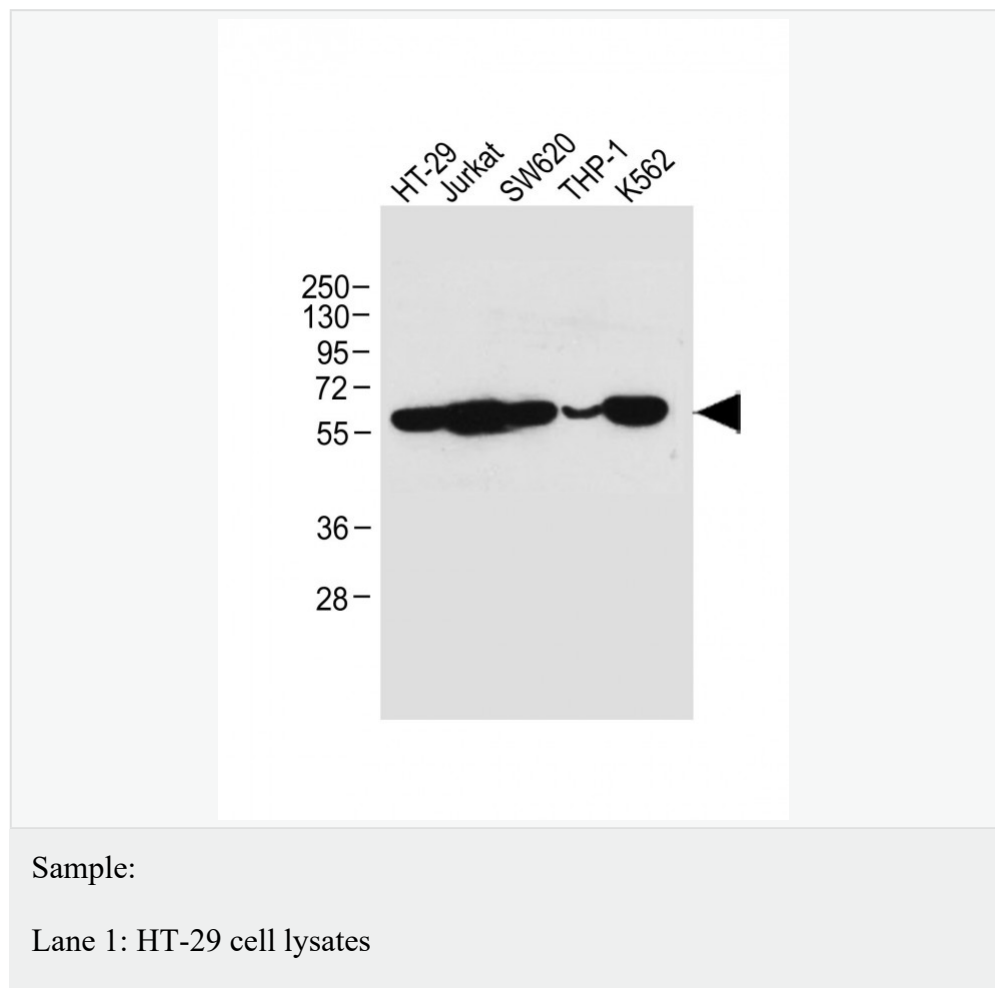
11035

Database links:

[Entrez Gene: 11035](#) Human

[SwissProt: Q9Y572](#) Human

Product Picture



Lane 2: Jurkat cell lysates

Lane 3: SW620 cell lysates

Lane 4: THP-1 cell lysates

Lane 5: K562 cell lysates

Primary: Anti-RIPK3 (SLM-51714M) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 57 kD

Observed band size: 57 kD