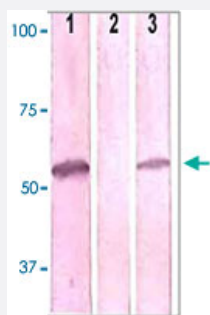


IRAK4 (phospho T345) monoclonal antibody, clone A8A8

Catalog # MAB2538

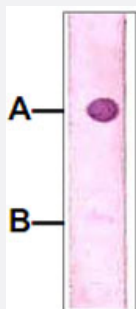
Size 100 ug

Applications



Western Blot (Cell lysate)

The 5 x 10⁷ Jurkat cells were stimulated by 50 ng/mL IL-1 for 10 min, collected, lysed, resolved onto 10% SDS-PAGE, transferred onto NC membrane, and followed by an immunoblotting with IRAK4 (phospho T345) monoclonal antibody, clone A8A8 (Cat # MAB2538) at 1 : 500 (Lane 1). Lane 2 was pre-incubated with Phosphospecific peptide. Lane 3 was pre-incubate with non-phospho specific peptide. An immunoreactive band is observed around ~51 KDa.



Dot Blot (Peptide)

Dot Blot : 1 ug peptide was blot onto NC membrane.

A : IRAK4 (pT345). B : IRAK4 (non phosphorylated). Followed by IRAK4 (phospho T345) monoclonal antibody, clone A8A8 (Cat # MAB2538) incubation at a 1 : 1000 dilution.

Specification

Product Description	Mouse monoclonal antibody raised against synthetic phosphopeptide of IRAK4.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding T345 of human IRAK4.
Sequence	VMTSR
Host	Mouse
Reactivity	Bovine, Dog, Human, Mouse

Specificity	This antibody recognizes IRAK4 (phospho T345) with a phosphorylated site at Threonine 345. It does not cross-react with non-phosphospecific peptide.
Form	Liquid
Isotype	IgG1, kappa
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	Western Blot (0.1-1 ug/mL) ELISA (0.01-0.1 ug/mL) Immunoprecipitation (2-5 ug/mL) Immunohistochemistry (2-5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In TBS, pH 7.2 (BSA, 10% Proclin300)
Storage Instruction	Store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

The 5×10^7 Jurkat cells were stimulated by 50 ng/mL IL-1 for 10 min, collected, lysed, resolved onto 10% SDS-PAGE, transferred onto NC membrane, and followed by an immunoblotting with IRAK4 (phospho T345) monoclonal antibody, clone A8A8 (Cat # MAB2538) at 1 : 500 (Lane 1). Lane 2 was pre-incubated with Phosphospecific peptide. Lane 3 was pre-incubated with non-phospho specific peptide. An immunoreactive band is observed around ~51 KDa.

- Immunohistochemistry

- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

- Dot Blot (Peptide)

Dot Blot : 1 ug peptide was blot onto NC membrane.

A : IRAK4 (pT345). B : IRAK4 (non phosphorylated). Followed by IRAK4 (phospho T345) monoclonal antibody, clone A8A8 (Cat # MAB2538) incubation at a 1 : 1000 dilution.

Gene Info — IRAK4

Entrez GeneID

[51135](#)

Gene Name	IRAK4
Gene Alias	IPD1, NY-REN-64, REN64
Gene Description	interleukin-1 receptor-associated kinase 4
Omim ID	606883 607676 610799
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a kinase that activates NF-kappaB in both the Toll-like receptor (TLR) and T-cell receptor (TCR) signaling pathways. The protein is essential for most innate immune responses. Mutations in this gene result in IRAK4 deficiency and recurrent invasive pneumococcal disease. Multiple transcript variants encoding different isoforms have been found for this gene. [supplied by RefSeq]
Other Designations	IRAK-4 mutated form 1 interleukin-1 receptor associated kinase 4

Publication Reference

- [IRAK4 mediates colitis-induced tumorigenesis and chemoresistance in colon cancer.](#)

Li Q, Chen Y, Zhang D, Grossman J, Li L, Khurana N, Jiang H, Grierson P, Herndon J, DeNardo DG, Challen GA, Liu J, Ruzinova MB, Fields RC, Lim KH.

JCI Insight 2019 Oct; 4(19):130867.

Application: PLA, Human, KM-12, HCT-116, DLD-1 cells

- [Tumor-Stroma IL1 \$\beta\$ -IRAK4 Feedforward Circuitry Drives Tumor Fibrosis, Chemoresistance, and Poor Prognosis in Pancreatic Cancer.](#)

Zhang D, Li L, Jiang H, Li Q, Wang-Gillam A, Yu J, Head R, Liu J, Ruzinova MB, Lim KH.

Cancer Research 2018 Apr; 78(7):1700.

Application: IF, IHC, Human, Pancreas, Pancreatitis, Pancreatic ductal adenocarcinoma, Capan-1 xenograft, KPC tumors

- [TLR signalling affects sperm mitochondrial function and motility via phosphatidylinositol 3-kinase and glycogen synthase kinase-3 \$\alpha\$.](#)

Zhu X, Shi D, Li X, Gong W, Wu F, Xuejiang G, Xiao H, Liu L, Zhou H.

Cellular Signalling 2015 Mar; 28(3):148.

Application: WB, Mouse, Sperm

- [Augmentation of therapeutic responses in melanoma by inhibition of IRAK-1,-4.](#)

Srivastava R, Geng D, Liu Y, Zheng L, Li Z, Joseph MA, McKenna C, Bansal N, Ochoa A, Davila E.

Cancer Research 2012 Dec; 72(23):6209.

Application: IHC-P, WB-Ce, Human, Malme-3M, SK-MEL-2, WM115, C32, RPMI-7951, A375, G361 cells, Melanoma

- [An unconventional role for miRNA: let-7 activates Toll-like receptor 7 and causes neurodegeneration.](#)

Lehmann SM, Krüger C, Park B, Derkow K, Rosenberger K, Baumgart J, Trimbuch T, Eom G, Hinz M, Kaul D, Habbel P, Kälén R, Franzoni E, Rybak A, Nguyen D, Veh R, Ninnemann O, Peters O, Nitsch R, Heppner FL, Golenbock D, Schott E, Ploegh HL, Wulczyn FG, Lehnardt S.

Nature Neuroscience 2012 Jun; 15(6):827.

Application: IHC, Mouse, Mouse cortical neurons

- [IRAK-4: a novel member of the IRAK family with the properties of an IRAK-kinase.](#)

Li S, Strelow A, Fontana EJ, Wesche H.

PNAS 2002 Apr; 99(8):5567.

Pathway

- [Apoptosis](#)
- [Neurotrophin signaling pathway](#)
- [Toll-like receptor signaling pathway](#)

Disease

- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Birth Weight](#)
- [Bronchiolitis](#)
- [Cardiovascular Diseases](#)
- [Chronic Disease](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)

- [Glioblastoma](#)
- [Glioma](#)
- [HIV Infections](#)
- [Hypersensitivity](#)
- [Infant](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Respiratory Syncytial Virus Infections](#)