

AbboMax, Inc

Innovation at Work

Mouse anti-Phospho-IRAK-4(pThr³⁴⁵)

Synonym: Interleukin-1 receptor-associated kinase 4; IRAK-4, IPD1; REN64; NY-REN-64

ANTIGEN PREPARATION

A synthetic peptide surrounding to the epitope -VMTSR- with a phosphorylation site at Thr345 of human IRAK-4 protein. This sequence is identical among human, mouse, bovine and dog.

BACKGROUND

IRAK (IL-1 associated serine/threonine kinase) is a critical regulator of Interleukin-1 (IL-1) induced activation of the NFkappaB pathway. IL-1 stimulation leads to the recruitment of interleukin-1 receptor-associated kinase (IRAK) to the IL-1 receptor, where IRAK is phosphorylated, ubiquitinated, and eventually degraded. There are four members (IRAK1, IRAK2, IRAK3/IRAK-M and IRAK4). IRAK-4, recently found another IRAK family member necessary for the IL-1 pathway, is able to phosphorylate IRAK *in vitro* suggests that IRAK-4 might be the IRAK kinase. IRAK4 is required for the efficient recruitment of IRAK to the IL-1 receptor complex.

PURIFICATION

The Mouse IgG is purified by Isotyping-specific Affinity Purification.

SPECIFICITY

This antibody recognizes IRAK-4(pT345) with a phosphorylated site at Threonine 345. It does not cross-react with non-phosphospecific peptide.

APPLICATIONS/SUGGESTED WORKING DILUTIONS

Western Blot	0.1-1 µg/ml
ELISA	0.01-0.1 µg/ml
Immunoprecipitation	2-5 µg/ml
IHC	2-5 µg/ml
Flow cytometry	Not tested

Order Information

Description:	Ms anti Phospho-IRAK4(pT345)
Catalogue#:	600-560
Lot#:	See the label
Size:	100 µg/200 ul
Host:	Mouse
Clone:	A8A8
Isotyping:	IgG1.k
Application:	ELISA, WB, IHC
Reactivity:	Hu, Ms, Bv, Dg

FORMULATION

This affinity purified antibody is supplied in sterile Phosphate-buffered saline (pH7.2) containing antibody stabilizer

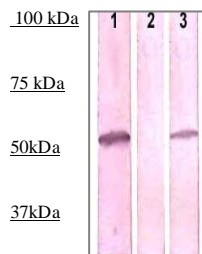
STORAGE

The antibodies are stable for 12 months from date of receipt when stored at -20°C to -70°C. The antibodies can be stored at 2°C-8°C for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

MOLECULAR WEIGHT:	~51 kDa
POSITIVE CONTROL:	Jurkat Cell lysate
CELLULAR LOCATION:	Cytoplasmic

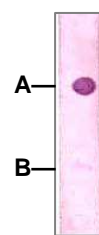
Optimal dilutions should be determined by researchers for the specific applications.

DATA ATTACHMENTS



Western Blot:

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 Mouse anti IRAK4 (pT345) (Cat#600-560) antibody 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.



Dot Blot:

1 µg peptide was blot onto NC membrane
A: IRAK-4(pT345)
B: IRAK-4(non phosphorylated)
Followed by Mouse anti IRAK-4 (pT345) (Cat# 600-560) incubation at a 1:1000 dilution.

REFERENCES

Li S et al (2002) IRAK-4, A novel member of the IRAK family with the properties of an IRAK-kinase. PNAS 99 (8): 5567-5572.

FOR RESEARCH USE ONLY.