

Mouse anti IRAK4(pT345) Monoclonal Antibody

Alternative Name(s): Interleukin-1 receptor-associated kinase 4; IRAK4

Order Information

Description: IRAK4(pT345)
Catalogue: 600-560
Lot: See label
Size: 100ug/200ul
Host: Mouse
Clone: A8A8

• Application: IHC(P), WB • Reactivity: Hu, Ms, Bv, Dg

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 Protein A-Affinity Chromatography according to Isotyping

FORMULATION

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

SPECIFICITY

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

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at –20oC to –70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

• Western Blot: 0.1-1 µg/ml

• ELISA: 0.01-0.1 µg/ml

• Immunoprecipitation: 2-5 µg/ml

• IHC: 2-10 µg/ml

· Flow cytometry: Not tested

• Molecular Weight: 51.0

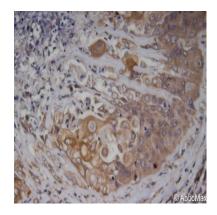
Positive Control: Kidney Tissue
Cellular Location: Cell Membrane

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



Mock Alu RNA
p-IRAK1
p-IRAK4
Vinculin

Western Blot: The whole lysate derived from Alu RNA-induced IRAK1 and IRAK4 phosphorylation in human RPE cells, immunoprobed by Mouse anti IRAK4(pT345) at 1:500 (Courtesy from Dr.Hirano Cell 149 (4), p847) Observed a major immunoreactive band at molecular weight ~51 kDa.



Immunohistochemistry: Human lung squamous carcinoma (FFPE) stained with Mouse anti-IRAK4(pT345) (Cat# 600-560) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

REFERENCES