

## Product datasheet for **TA354510**

### IRAK4 Mouse Monoclonal Antibody [Clone ID: A8A8]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	A8A8
Applications:	Dot, WB
Recommended Dilution:	WB 0.1-1 µg/ml ELISA 0.01-0.1 µg/ml IP 2-5 µg/ml IHC 2-10 µg/ml FC 5-10 µg/ml
Reactivity:	Human, Mouse, Bovine, Dog
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	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.
Formulation:	This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer.
Purification:	The mouse IgG is purified by Protein A-Affinity Chromatography according to Isotyping
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	~51 kDa
Gene Name:	interleukin 1 receptor associated kinase 4
Database Link:	<a href="#">NP_001107654</a> <a href="#">Entrez Gene 266632 Mouse</a> <a href="#">Entrez Gene 486601 Dog</a> <a href="#">Entrez Gene 51135 Human</a> <a href="#">Q9NWZ3</a>



[View online »](#)

**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.

**Synonyms:**

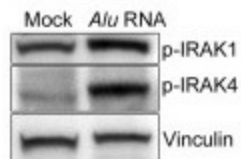
IPD1; IRAK-4; NY-REN-64; REN64

**Protein Families:**

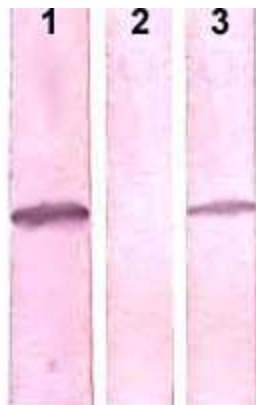
Druggable Genome, Protein Kinase

**Protein Pathways:**

Apoptosis, Neurotrophin signaling pathway, Toll-like receptor signaling pathway

**Product images:**


WB: Western blot of Alu RNA-induced IRAK1 and IRAK4 phosphorylation (1:500) in human RPE cells. Courtesy from Dr. Hirano Cell 149 (4), p847-859, (2012)



WB: 7 The 5x10<sup>6</sup> Jurkat cells were stimulated by 50ng/ml IL-1 for 10min, collected, lysed, resolved onto 10% SDS-PAGE, transferred onto NC membrane, and followed by an immunoblotting with Mouse anti-IRAK4 (pT345) antibody at 1:500 (lane 1). Lane 2 was pre-incubated with Phosphospecific peptide, Lane 3 was pre-incubate with nonphospho specific peptide. An immunoreactive band is observed around ~51 kDa.



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