

## Anti-IRAK4 Antibody (3T950)

## Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	3T950
Purification:	Affinity-chromatography

## Applications

Verified Activity:	1. Western Blot -Positive WB detected in: THP-1 whole cell lysate, U251 whole cell lysate -All lanes: IRAK4 antibody at 1:2000 -Secondary: Goat polyclonal to rabbit IgG at 1/50000 dilution -Predicted band size: 52, 38 kDa -Observed band size: 55 kDa
	2. Overlay histogram showing Jurkat cells stained with TMAH-00637 (red line) at 1:50. The cells were fixed with 70% Ethylalcohol (18h) and then incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1 $\mu$ g/1*10 <sup>6</sup> cells) for 1 h at 4°C. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30min at 4°C. Control antibody (green line) was Rabbit IgG (1 $\mu$ g/1*10 <sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.
Application:	ELISA, WB, FCM
Recommended	WB:1:500-1:5000; FCM:1:20-1:200.

## Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

## Antigen Details

Immunogen:	A synthetic peptide: Human IRAK4
Antigen Species:	Human
Gene ID:	51135
Uniprot ID:	Q9NWZ3
Synonyms:	interleukin-1 receptor-associated kinase 4;IRAK-4;NY-REN-64;IPD1;REN64
Biology Area:	Cardiovascular, Immunology, Signal transduction

## Research Background

Serine/threonine-protein kinase that plays a critical role in initiating innate immune response against foreign pathogens. Involved in Toll-like receptor (TLR) and IL-1R signaling pathways. Is rapidly recruited by MYD88 to the receptor-signaling complex upon TLR activation to form the Myddosome together with IRAK2. Phosphorylates

initially IRAK1, thus stimulating the kinase activity and intensive autophosphorylation of IRAK1. Phosphorylates E3 ubiquitin ligases Pellino proteins (PELI1, PELI2 and PELI3) to promote pellino-mediated polyubiquitination of IRAK1. Then, the ubiquitin-binding domain of IKBKG/NEMO binds to polyubiquitinated IRAK1 bringing together the IRAK1-MAP3K7/TAK1-TRAF6 complex and the NEMO-IKKA-IKKB complex. In turn, MAP3K7/TAK1 activates IKKs (CHUK/IKKA and IKBKB/IKKB) leading to NF-kappa-B nuclear translocation and activation. Alternatively, phosphorylates TIRAP to promote its ubiquitination and subsequent degradation. Phosphorylates NCF1 and regulates NADPH oxidase activation after LPS stimulation suggesting a similar mechanism during microbial infections.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481