

Datasheet for ABIN7127580

Recombinant anti-IRAK4 antibody**2** Images[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	IRAK4
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This IRAK4 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS)

Product Details

Immunogen:	A synthesized peptide derived from human IRAK4
Clone:	10H4
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	IRAK4
Alternative Name:	IRAK4 (IRAK4 Products)
Background:	Background: Serine/threonine-protein kinase that plays a critical role in initiating innate immune

Target Details

response against foreign pathogens. Involved in Toll-like receptor (TLR) and IL-1R signaling pathways (PubMed:17878374). 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.

Aliases: Interleukin-1 receptor-associated kinase 4 (IRAK-4) (EC 2.7.11.1) (Renal carcinoma antigen NY-REN-64), IRAK4

UniProt: [Q9NWZ3](#)

Pathways: [NF-kappaB Signaling](#), [TLR Signaling](#), [Activation of Innate immune Response](#), [Toll-Like Receptors Cascades](#)

Application Details

Application Notes: Recommended dilution: WB:1:500-1:5000, FC:1:20-1:200,

Restrictions: For Research Use only

Handling

Format: Liquid

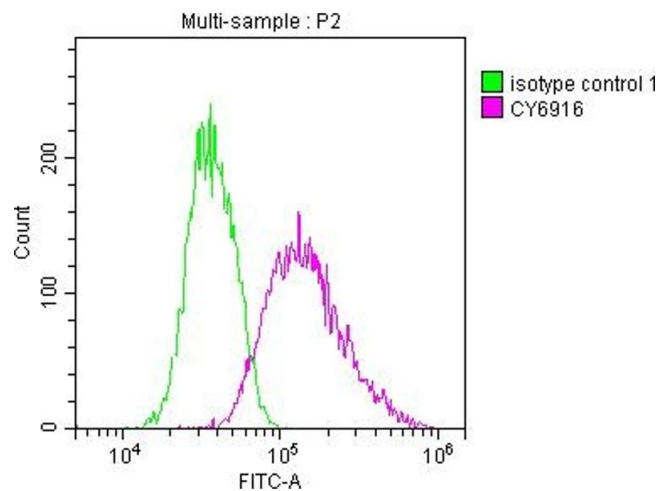
Buffer: Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

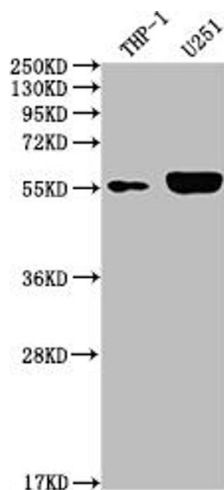
Storage: -20 °C, -80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



Flow Cytometry

Image 1. Overlay histogram showing Jurkat cells stained with ABIN7127580 (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 µg/1*106cells) for 1 h at 4 °C. The secondary antibody used was FITC-conjugated goat anti-rabbit IgG (H+L) at 1/200 dilution for 30 min at 4 °C. Control antibody (green line) was Rabbit IgG (1 µg/1*106cells) used under the same conditions. Acquisition of >10,000 events was performed.



Western Blotting

Image 2. 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.