

anti- IRAK1 antibody

Product Information

Catalog No.: FNab04382

Size: 100μg Form: liquid

Purification: Immunogen affinity purified

Purity: ≥95% as determined by SDS-PAGE

Host: Rabbit

Clonality: polyclonal

Clone ID: None IsoType: IgG

Storage: PBS with 0.02% sodium azide and 50% glycerol pH 7.3, -20°C for 12

months (Avoid repeated freeze / thaw cycles.)

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. Association with MYD88 leads to IRAK1 phosphorylation by IRAK4 and subsequent autophosphorylation and kinase activation. 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 the interferon regulatory factor 7(IRF7) to induce its activation and translocation to the nucleus, resulting in transcriptional activation of type I IFN genes, which drive the cell in an antiviral state. When sumoylated, translocates to the nucleus and phosphorylates STAT3.

Immunogen information

Immunogen: interleukin-1 receptor-associated kinase 1

Synonyms: IRAK, IRAK 1, IRAK 1, pelle

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1



Observed MW: 70 kDa Uniprot ID: P51617

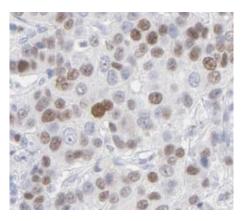
Application

Reactivity: Human, Mouse, Rat

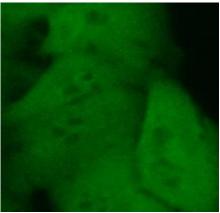
Tested Application: ELISA, FC, IF, IHC, IP, WB

Recommended dilution: WB: 1:500-1:3000; IP: 1:500-1:1000; IHC: 1:50-1:500; IF: 1:50-1:500

Image:

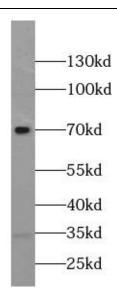


Immunohistochemistry of paraffin-embedded human breast cancer tissue slide using FNab04382(IRAK1 Antibody) at dilution of 1:50



Immunofluorescent analysis of (10% Formaldehyde) fixed A549 cells using FNab04382 (IRAK1 antibody) at dilution of 1:50 and Alexa Fluor 488-congugated Goat Anti-Rabbit IgG(H+L)





MCF-7 cells were subjected to SDS PAGE followed by western blot with FNab04382(IRAK1 antibody) at dilution of 1:1500

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