

# IRAK-M (H-150): sc-366015

## BACKGROUND

Interleukin-1 receptor (IL1R)-associated kinases (IRAKs) are important mediators in the signal transduction of Toll-like receptor (TLR) and IL1R family members, collectively referred to as TIRs. Binding of IL-1 to its cognate receptor results in the activation of the NFκB signaling pathway. An IL-1-dependent kinase termed IRAK-1 (for IL-1 receptor-associated kinase 1) coimmunoprecipitates with activated IL-1RI and is implicated as an upstream mediator of NFκB activation. A related *Drosophila* protein, Pelle, is a known upstream activator of Dorsal, the *Drosophila* homolog of NFκB. IRAK-2 is a proximal mediator of IL1, a component of the IL1R signaling complex, and is required for IL1R-induced NFκB activation. IRAK-4, like IRAK-1 and Pelle, has auto- and cross-phosphorylation kinase activity. IRAK-4 is strongly expressed in kidney and is also found in lung, testis, small intestine, breast, liver, and placenta. In contrast to the other IRAKs that are expressed in most cell types, IRAK-M is restricted to monocytic cells. IRAK-M mRNA transcripts are found predominantly in PBL and the monocytic cell lines U937 and THP-1.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: IRAK3 (human) mapping to 12q14.3; Irak3 (mouse) mapping to 10 D2.

## SOURCE

IRAK-M (H-150) is a rabbit polyclonal antibody raised against amino acids 275-424 mapping within an internal region of IRAK-M of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

IRAK-M (H-150) is recommended for detection of IRAK-M of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IRAK-M (H-150) is also recommended for detection of IRAK-M in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for IRAK-M siRNA (h): sc-39098, IRAK-M siRNA (m): sc-146282, IRAK-M shRNA Plasmid (h): sc-39098-SH, IRAK-M shRNA Plasmid (m): sc-146282-SH, IRAK-M shRNA (h) Lentiviral Particles: sc-39098-V and IRAK-M shRNA (m) Lentiviral Particles: sc-146282-V.

Molecular Weight of IRAK-M: 68 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **IRAK-M (XX-6): sc-100389**, our highly recommended monoclonal alternative to IRAK-M (H-150).