



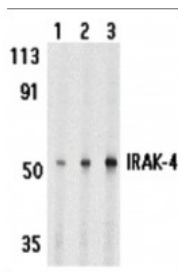
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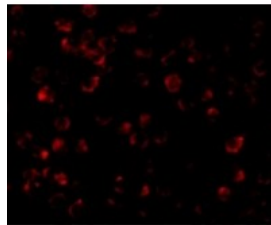
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IRAK-4 Antibody

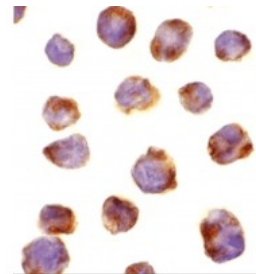
CATALOG NUMBER: 3125



Western blot analysis of IRAK-4 in HeLa cell lysate with IRAK-4 antibody at 1 (lane 1), 2 (lane 2), and 4 (lane 3) ug/mL, respectively.



Immunofluorescence of IRAK-4 in K562 cells with IRAK-4 antibody at 10 ug/mL.



Immunocytochemistry of IRAK-4 in K562 cells with IRAK-4 antibody at 10 ug/mL.

Specifications

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|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SPECIES REACTIVITY: | Human |
| HOMOLOGY: | Predicted species reactivity based on immunogen sequence: Bovine: (85%), Mouse: (91%) |
| TESTED APPLICATIONS: | ELISA, ICC, IF, WB |
| APPLICATIONS: | IRAK-4 antibody can be used for the detection of IRAK-4 by Western blot at 1 to 4 ug/mL. Antibody can also be used for immunocytochemistry starting at 10 ug/mL. For immunofluorescence start at 10 ug/mL. Antibody validated: Western Blot in human samples; Immunocytochemistry in human samples and Immunofluorescence in human samples. All other applications and species not yet tested. |
| USER NOTE: | Optimal dilutions for each application to be determined by the researcher. |
| POSITIVE CONTROL: | 1) Cat. No. 1204 - K562 Cell Lysate 2) Cat. No. 17-004 - K-562 Cell Slide |
| PREDICTED MOLECULAR WEIGHT: | Predicted: 51 kDa Observed: 51 kDa |
| SPECIFICITY: | IRAK-4 antibody is predicted to not cross-react with other members of the IRAK protein family. |
| IMMUOGEN: | IRAK-4 antibody was raised against a synthetic peptide corresponding to 13 amino acids near the carboxy terminus of human IRAK-4. The immunogen is located within the last 50 amino acids of IRAK-4. |
| HOST SPECIES: | Rabbit |

Properties

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|------------------------|-------------------------------------------------------------------------|
| PURIFICATION: | IRAK-4 Antibody is affinity chromatography purified via peptide column. |
| PHYSICAL STATE: | Liquid |
| BUFFER: | IRAK-4 Antibody is supplied in PBS containing 0.02% sodium azide. |

| | |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CONCENTRATION: | 1 mg/mL |
| STORAGE CONDITIONS: | IRAK-4 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| CLONALITY: | Polyclonal |
| ISOTYPE: | IgG |
| CONJUGATE: | Unconjugated |

Additional Info

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|-------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| ALTERNATE NAMES: | IRAK-4 Antibody: IPD1, REN64, IRAK-4, NY-REN-64, Interleukin-1 receptor-associated kinase 4, Renal carcinoma antigen NY-REN-64 |
| ACCESSION NO.: | AAM15772 |
| PROTEIN GI NO.: | 20219010 |
| OFFICIAL SYMBOL: | IRAK4 |
| GENE ID: | 51135 |

Background

BACKGROUND: IRAK-4 Antibody: Interleukin-1 (IL-1) and lipopolysaccharide (LPS) induces cellular responses through IL-1 receptor (IL-1R) and Toll-like receptors (TLR). IL-1R-associated kinases (IRAK, IRAK2, and IRAK-M) regulate the activation of NF- κ B and MAP kinase (MAPK) by IL-1R/TLR. A novel member in the IRAK/Pelle family was recently identified and designated IRAK-4. Overexpression of IRAK-4 activates NF- κ B and MAPK pathways. IRAK-4 interacts with and phosphorylates IRAK-1. IRAK-4-deficient animals are completely resistant to the challenge with LPS. Animals and humans lacking IRAK-4 are impaired in their responses to viral and bacterial challenges. Members in IRAK/Pelle family play a central role in IL-1R/TLR mediated inflammatory responses and in innate immunity.

REFERENCES:

- 1) Cao Z, Henzel WJ, and Gao X. IRAK: a kinase associated with the interleukin-1 receptor. *Science* 1996; 271:1128-31.
- 2) Muzio M, Ni J, Feng P, et al. IRAK (Pelle) family member IRAK-2 and MyD88 as proximal mediators of IL-1 signaling. *Science* 1997; 278:1612-5
- 3) Wesche H, Gao X, Li X, et al. IRAK-M is a novel member of the Pelle/interleukin-1 receptor-associated kinase (IRAK) family. *J. Biol. Chem.* 1999; 274:19403-10.
- 4) Li S, Strelow A, Fontana EJ, et al. IRAK-4: a novel member of the IRAK family with the properties of an IRAK-kinase. *Proc. Natl. Acad. Sci. USA* 2002; 99:5567-72.

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January 11, 2019