

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human IRAK3 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human IRAK3 aa 1-596 Accession # Q9Y616
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below

DATA

<p>Western Blot</p> <p>Detection of Human IRAK3 by Western Blot. Western blot shows lysates of EOL-1 human acute myeloid (eosinophilic) leukemia cell line and THP-1 human acute monocytic leukemia cell line. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human IRAK3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6264) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for IRAK3 at approximately 68 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Western Blot</p> <p>Detection of Human IRAK3 by Western Blot. Western blot shows recombinant human IRAK1, recombinant human IRAK2, recombinant human IRAK3, and recombinant human IRAK4 (2 ng/lane). PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Human IRAK3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6264) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

IRAK3 (Interleukin-1 receptor-associated kinase 3; also IRAK-M) is a 68-70 kDa member of the Pelle subfamily, TKL Ser/Thr protein kinase family of proteins. IRAK3 has limited expression, being mainly found in macrophages, eosinophils and respiratory epithelium, including type II alveolar cells. IRAK3 is a negative regulator of TLR signaling. Following TLR activation, it appears to form a complex with MyD88, IRAK1 and IRAK4 on the TLR cytoplasmic domain. This effectively blocks IRAK1/4 phosphorylation and inhibits NFκB and MAPK downstream activation. Human IRAK3 is 596 amino acids (aa) in length, contains one death domain (aa 41-106) and a nonfunctional protein kinase domain (aa 171-443). There are six Ser phosphorylation sites. There is one splice variant with a deletion of aa 45-105.