

IRAK1 Polyclonal Antibody

Store at -20°C

Catalog Number: A16643

Pub. No. MAN0009281 Rev. 1.00

Clonality: Polyclonal

Amount: 100 µL

Host/Class: Rabbit

Reactivity: Human IRAK1

Species Reactivity: Human, Monkey

Product Description

Interleukin-1 (IL-1) receptor-associated kinase (IRAK) is a serine/threonine-specific kinase that can be co-precipitated in an IL-1-inducible manner with the IL-1 receptor (1). There are four members in the mammalian family of IRAK molecules, including IRAK1, IRAK2, IRAK3/IRAK-M, and IRAK4. The binding of IL-1 to IL-1 receptor type I (IL-1RI) initiates the formation of a complex that includes IL-1RI, AcP, MyD88, and IRAKs (2). IRAK undergoes autophosphorylation shortly after IL-1 stimulation. The subsequent events involve IRAK dissociation from the IL-1RI complex, its ubiquitination, and its association with TAB2 and TRAF6. The resulting IRAK-TRAF6-TAB2 complex is then released into the cytoplasm where it activates protein kinase cascades, including TAK1, IKKs, and the stress-activated kinases (3).

Product Specifications

Immunogen:	A synthetic peptide corresponding to residues surrounding glycine 696 of human IRAK1
Apparent MW:	78–105 kDa
Gene ID:	3654
Protein Accession No.:	P51617
Lot:	See product label

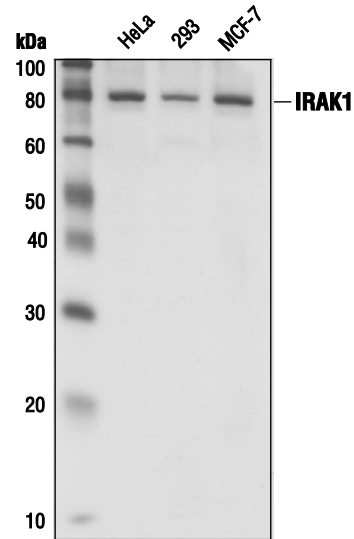


Figure 1 Western blot analysis of extracts from HeLa, 293 and MCF-7 cell lines using IRAK1 Polyclonal Antibody.

Product Applications

Applications reported for this antibody include western blot, and immunofluorescence (immunocytochemistry).

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Application	Recommended Dilution
Western blotting	1:1000
Immunofluorescence (immunocytochemistry)	1:50

Storage and Handling

Store reagents at -20°C. Avoid repeated freezing and thawing. Do not aliquot the antibody.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage Buffer

10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/mL BSA, 50% glycerol.

For research use only. Not for use in diagnostic procedures

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

References

1. Dinarello, C.A. (1996) *Blood* 87, 2095-147.
2. Takaesu, G. et al. (2001) *Mol Cell Biol* 21, 2475-84.
3. Janssens, S. and Beyaert, R. (2003) *Mol Cell* 11, 293-302.

Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Limited Product Warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at www.lifetechnologies.com/termsandconditions. If you have any questions, please contact Life Technologies at www.lifetechnologies.com/support.

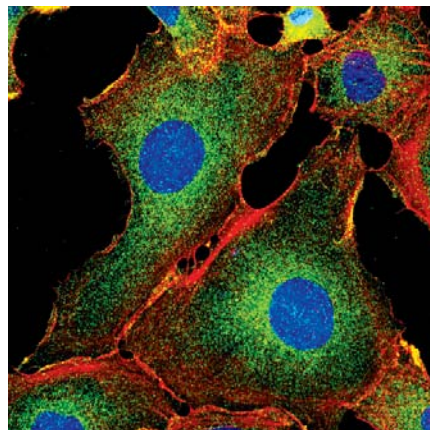


Figure 2 Confocal immunofluorescent analysis of HT-1080 cells using IRAK1 Polyclonal Antibody (green). Actin filaments have been labeled with DY-554 phalloidin (red). A fluorescent DNA dye was used to produce the blue pseudocolor.

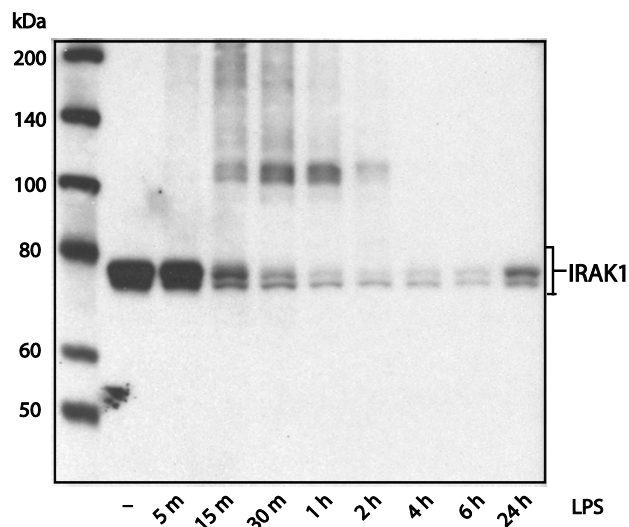


Figure 3 Western blot analysis of extracts from THP-1 cells, differentiated with TPA (80 nM for 24 h) and treated with 1 µg/mL LPS for the indicated times, using IRAK1 Polyclonal Antibody.

Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

DISCLAIMER: LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) DISCLAIM ALL WARRANTIES WITH RESPECT TO THIS DOCUMENT, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. TO THE EXTENT ALLOWED BY LAW, IN NO EVENT SHALL LIFE TECHNOLOGIES AND/OR ITS AFFILIATE(S) BE LIABLE, WHETHER IN CONTRACT, TORT, WARRANTY, OR UNDER ANY STATUTE OR ON ANY OTHER BASIS FOR SPECIAL, INCIDENTAL, INDIRECT, PUNITIVE, MULTIPLE OR CONSEQUENTIAL DAMAGES IN CONNECTION WITH OR ARISING FROM THIS DOCUMENT, INCLUDING BUT NOT LIMITED TO THE USE THEREOF.

©2013 Life Technologies Corporation. All rights reserved. The trademarks mentioned herein are the property of Life Technologies Corporation and/or its affiliates or their respective owners.

For support visit www.lifetechnologies.com/support or email techsupport@lifetech.com

www.lifetechnologies.com

28 August 2013

life
technologies™