

## Anti-TAK1

Rabbit Polyclonal Antibody

**Catalog # M15-63R**

Lot # O2109-32

### Cited Applications

WB, ELISA, IF, IHC

*Ideal working dilutions for each application should be empirically determined by the investigator.*

### Specificity

Recognizes the TAK1 protein

### Cross Reactivity

Human, Mouse and Rat

### Host/Isotype/Clone#

Rabbit, IgG

### Immunogen

TAK1 antibody was raised against a synthetic peptide corresponding to 14 amino acids near the amino-terminus of human TAK1 isoform α

### Formulation

PBS + 0.02% sodium azide

### Stability

1yr at -20°C from date of shipment

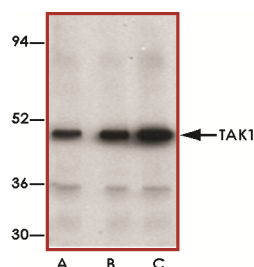
### Scientific Background

TAK1 is a serine/threonine protein kinase that mediates signaling by TGFβ and morphogenetic protein (BMP) (1). In response to IL-1, TAK1 forms a kinase complex with TAB1 and this complex is required for the activation of nuclear factor kappa B (NfκB). TAK1 can also activate MAPK8/JNK and MAP2K4/MKK4 and thus play a role in the cell response to environmental stress. Tak1 is essential for thymocyte development and activation and deletion of TAK1 prevents maturation of single-positive thymocytes displaying CD4 or CD8 (2). Thymocytes lacking TAK1 fail to activate NfκB and JNK and are prone to apoptosis upon stimulation.

### References

1. Yamaguchi, K. et al: Identification of a member of the MAPKKK family as a potential mediator of TGF-beta signal transduction. *Science* 270: 2008-2011, 1995.
2. Liu, H.-H. et al: Essential role of TAK1 in thymocyte development and activation. *Proc. Nat. Acad. Sci.* 103: 11677-11682, 2006.

### Sample Data



Western blot analysis of TAK1 in Rat thymus cell lysate with TAK1 antibody at (A) 1, (B) 2, and (C) 4 µg/ml.

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Purification

Affinity chromatography

Stability

1yr at -20°C from date of shipment

Storage & Shipping

Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

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