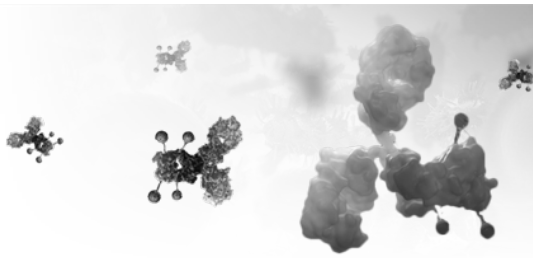

Rabbit Anti-Human TAK1 monoclonal antibody, clone 39I36M79 (CABT-L1459)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	This antibody is predicted to react with Rhesus monkey, orangutan, chimpanzee, mouse, rat, equine, porcine, bovine, chicken, Xenopus and zebrafish based on sequence homology.
Target	MAP3K7
Immunogen	A recombinant protein corresponding to amino acids 476-606 of O43318.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	39I36M79
Purification	Protein A Purified
Conjugate	Unconjugated
Applications	FC, ICC, IF, WB
Format	Liquid
Concentration	0.5 mg/ml
Buffer	PBS
Preservative	0.09% Sodium Azide
Storage	Maintain refrigerated at 2-8°C for up to 1 month. For long term storage store at -20°C

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BACKGROUND

Introduction	TAK1 (also known as MAP3K7) is a versatile protein with many signaling functions. Originally identified as a TGF- beta-activated kinase, TAK1 interacts with TGF- beta-receptor and TRAF6 to modulate TGF- beta activation of JNK and p38. It has additional roles in activation of p38 and JNK through Wnt, BMP, and activin signaling pathways as well in response to thyroid hormone, osmotic stress, endothelin, and ephrine. Through activation of von Hippel-Lindau tumor suppressor expression, TAK1 represses PDGF-B, integrin beta1 and integrin beta5, promoting proper wound healing.TAK1 also plays an essential role in IKK activation in numerous signaling pathways including IL-1, IL-6, IL-18, TNF, CD40, TLR, and RIG-I. Activation of the TAK1-IKK pathway requires TAB2/3 and ubiquitination. In this process, TAB2/3 binds to the C-terminal region of TAK1 and becomes polyubiquitinated, TAK1 is autophosphorylated at Thr178, Thr184, Thr187 and Ser192, and finally TAK1 phosphorylates IKK- beta. Additionally, TAK1 represses human telomerase reverse transcriptase suggesting a role in regulation of cell lifespan.
Keywords	MAP3K7;mitogen-activated protein kinase kinase kinase 7;TAK1;MEKK7;TGF1a;TGF-beta activated kinase 1;TGF-beta-activated kinase 1;transforming growth factor-beta-activated kinase 1

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