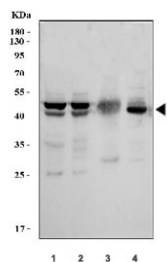


MKK7 Antibody / MAP2K7 / MEK7 (R31022)

Catalog No.	Formulation	Size
R31022	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Monkey
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	O14733
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This MKK7 antibody is available for research use only.



Western blot testing of 1) human HeLa, 2) monkey COS-7, 3) rat skeletal muscle and 4) mouse skeletal muscle tissue lysate with MKK7 antibody. Predicted molecular weight ~47 kDa.

Description

MAP2K7 (Mitogen-activated protein kinase kinase 7), also known as MAP kinase kinase 7 (MAPKK7), JNKK2, PRKMK7, Mek7 and MKK7, is an enzyme that in humans is encoded by the MAP2K7 gene. This protein is a member of the mitogen-activated protein kinase kinase family. The protein exists as six different isoforms with three possible N-termini (alpha, beta, and gamma isoforms) and two possible C-termini (1 and 2 isoforms). Schramek et al.(2011) showed that the doxorubicin-mediated DNA damage response in human A549 lung carcinoma cells caused rapid phosphorylation and upregulation of p53 (TP53). MKK7 / Mek7 knockdown reduced p53 phosphorylation, delayed p53 upregulation, and interfered with cell cycle arrest at G2/M. the protein was activated in primary lung tumors, and tumors with a p53 mutation

showed even higher MKK7 phosphorylation. Schramek et al.(2011) concluded that MKK7 / Mek7 exerts its tumor suppressive function through p53.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the MKK7 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of human MEK7/MKK7 (ARRRIDLNLDISPQRPR) was used as the immunogen for this MKK7 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the MKK7 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.