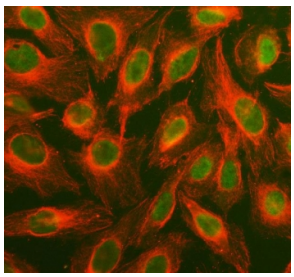
MAPK1/3 Antibody / ERK1/2 (R30228)

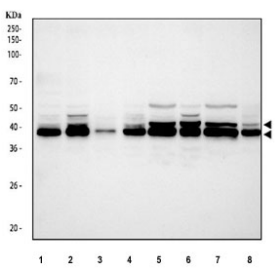
Catalog No.	Formulation	Size
R30228	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

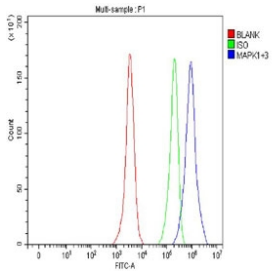
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P28482
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This MAPK1/3 antibody is available for research use only.



Immunofluorescent staining of FFPE human U-2 OS cells with MAPK1/3 antibody (green) and Alpha Tubulin mAb (red). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HeLa, 2) human K562, 3) human A431, 4) human U-2 OS, 5) rat brain, 6) rat C6, 7) mouse brain and 8) mouse Neuro-2a cell lysate with MAPK1/3 antibody. Predicted molecular weight ~41 kDa (MAPK1) and ~36 kDa (MAPK3).



Flow cytometry testing of fixed and permeabilized human HeLa cells with MAPK1/3 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= MAPK1/3 antibody.

Description

MAPK1 (ERK2) shares high homology with MAPK3 (ERK1). MAP kinase phosphatase as a locus of flexibility in a mitogen-activated protein kinase signaling network. Mitogen-activated protein (MAP) kinases (also known as ERKs) have been established to function as important mediators of signal transduction by growth factor receptors. ERK1/ERK2-dependent activation of endogenous ribosomal transcription, while inactivation of ERK1/ERK2 causes an equally immediate reversion to the basal transcription level. ERK1/ERK2 was found to phosphorylate the architectural transcription factor UBF at amino acids 117 and 201 within HMG boxes 1 and 2, preventing their interaction with DNA. Mutation of these sites inhibited transcription activation and abrogated the transcriptional response to ERK1/ERK2.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the MAPK1/3 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the N-terminus of human MAPK1/3 (ARVADPDHDHTGFL) was used as the immunogen for this MAPK1/3 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the MAPK1/3 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.