

## Basic Information

Product Name	Anti-MAPK1/3 Antibody	
Gene Name	MAPK1/MAPK3	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human MAPK1/3, identical to the related rat and mouse sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	38, 42 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200	

## Storage

12 months from date of receipt, -20°C as supplied.

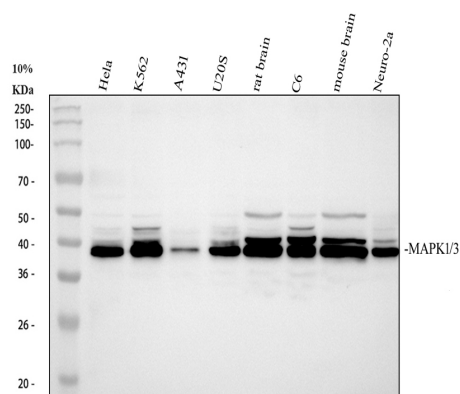
## Background Information

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.

## Reference

Anti-MAPK1/3 Antibody被引用在10文献中。

## Selected Validation Data



Western blot analysis of MAPK1/3 using anti-MAPK1/3 antibody (BA1657).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HeLa whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human A431 whole cell lysates,

Lane 4: human U2OS whole cell lysates,

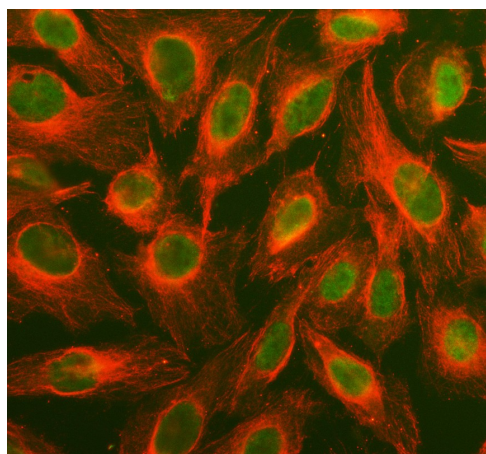
Lane 5: rat brain tissue lysates,

Lane 6: rat C6 whole cell lysates,

Lane 7: mouse brain tissue lysates,

Lane 8: mouse Neuro-2a whole cell lysates.

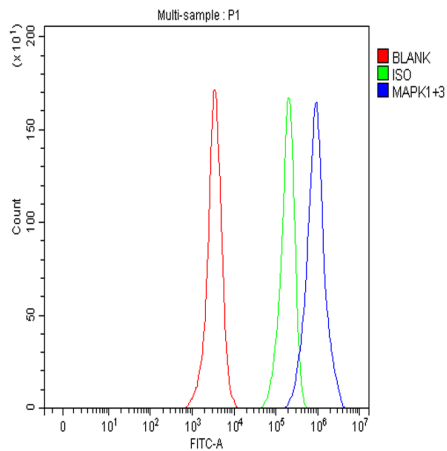
After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-MAPK1/3 antigen affinity purified polyclonal antibody (BA1657) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for MAPK1/3 at approximately 38, 42 kDa. The expected band size for MAPK1/3 is at 41 kDa/43 kDa.



IF analysis of MAPK1/3 using anti-MAPK1/3 antibody (BA1657) and anti-Beta Tubulin antibody (M01857-3).

MAPK1/3 was detected in an immunocytochemical section of U2OS cells.

The section was incubated with rabbit anti-MAPK1/3 Antibody (BA1657) at a dilution of 1:100. Dylight488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and Cy3-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1031) were used as secondary antibody.



Flow Cytometry analysis of Hela cells using anti-MAPK1/3 antibody (BA1657).

Overlay histogram showing Hela cells stained with BA1657 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MAPK1/3 Antibody (BA1657) at 1:100 dilution for 30 min at 20°C.

DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.