

## Basic Information

<b>Product Name</b>	Anti-JNK2/MAPK9 Antibody	
<b>Gene Name</b>	MAPK9	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human, mouse, rat	
<b>Tested Application</b>	WB, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	A synthetic peptide corresponding to a sequence in the middle region of human JNK2 identical to the related mouse and rat sequences.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	50 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200

## Storage

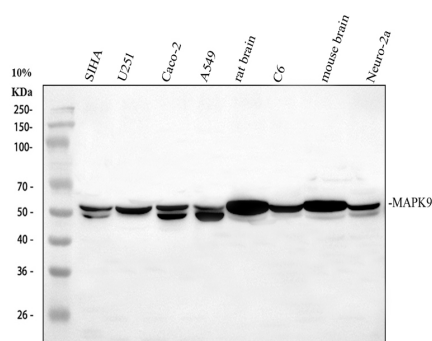
12 months from date of receipt, -20°C as supplied.

## Background Information

JNK2 is also known as MAPK9. The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase targets specific transcription factors, and thus mediates immediate-early gene expression in response to various cell stimuli. It is most closely related to MAPK8, both of which are involved in UV radiation induced apoptosis, thought to be related to the cytochrome c-mediated cell death pathway. Also, this gene and MAPK8 are also known as c-Jun N-terminal kinases. This kinase blocks the ubiquitination of tumor suppressor p53, and thus it increases the stability of p53 in nonstressed cells. Studies of this gene's mouse counterpart suggest a key role in T-cell differentiation. Several alternatively spliced transcript variants

encoding distinct isoforms have been reported.

## Selected Validation Data



Western blot analysis of JNK2/MAPK9 using anti-JNK2/MAPK9 antibody (PB0522). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human SiHa whole cell lysates,

Lane 2: human U251 whole cell lysates,

Lane 3: human Caco-2 whole cell lysates,

Lane 4: human A549 whole cell lysates,

Lane 5: rat brain tissue lysates,

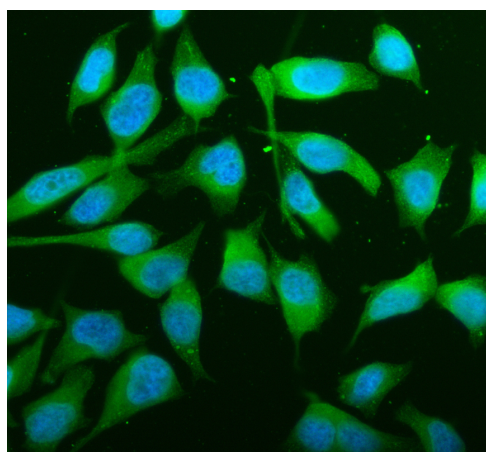
Lane 6: rat C6 whole cell lysates,

Lane 7: mouse brain tissue lysates,

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

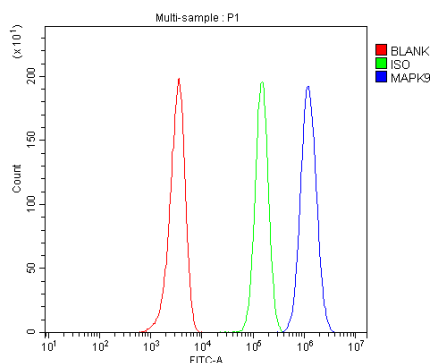
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-JNK2/MAPK9 antigen affinity purified polyclonal antibody (PB0522) 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 JNK2/MAPK9 at approximately 48-50 kDa. The expected band size for JNK2/MAPK9 is at 48 kDa.



ICC/IF analysis of JNK2/MAPK9 using anti-JNK2/MAPK9 antibody (PB0522).

JNK2/MAPK9 was detected in an immunocytochemical section of HeLa cells. The section was incubated with rabbit anti-JNK2/MAPK9 Antibody (PB0522) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of HEL cells using anti-JNK2/MAPK9 antibody (PB0522).

Overlay histogram showing HEL cells stained with PB0522 (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-JNK2/MAPK9 Antibody (PB0522) at 1:100 dilution for 30 min at 20°C. Fluoro488 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.