



Qty: 100 µL

(Sufficient for 10 Western blots)

Rabbit anti-phospho-JNK (Thr183/Tyr185)

For Research Use Only

Catalog No. 36-9300

Lot No.

Rabbit anti-phospho-JNK (Thr183/Tyr185)

FORM

This polyclonal antibody is supplied as a 100 µl aliquot in 10mM sodium phosphate (pH 7.4) containing 20mM sodium chloride and no preservative. This antibody is epitope-affinity purified using a dually phosphorylated peptide that corresponds to the active form of the JNK enzymes.

PAD: PD183

IMMUNOGEN

Peptide derived from the catalytic core of the active (dually phosphorylated) form of JNK (c-Jun N-terminal kinase, SAPK), corresponding to Thr183 and Tyr185 of the mammalian JNK2 enzyme.

SPECIFICITY

This antibody is specific for the dually phosphorylated, active form of JNK.

REACTIVITY

Reactivity has been confirmed with sorbitol-treated rat PC12 pheochromocytoma cells by immunocytochemistry and with UV-treated human HEK-293 cell lysates by Western blotting. Untreated HEK-293 cell lysates did not demonstrate reactivity with this antibody.

Sample	Western Blotting	Immunocytochemistry
Rat	+++	+++
Human	+++	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following dilution ranges are recommended starting points for this product.

Western Blotting : 1:100 – 1:1000
Immunocytochemistry*: 1:250

* When used at a 1:250 dilution along with an anti-rabbit CyTM3 conjugate detection system, this antibody strongly labels sorbitol-treated PC12 cells and weakly labels untreated cells.

STORAGE

Store at 2-8°C for daily or weekly use, after adding preservative. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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(Rev 10/08) DCC-08-1089

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BACKGROUND

In mammals, the mitogen-activated protein kinase (MAP) kinase family includes the ERK, JNK and p38 kinases. MAPK signaling pathways regulate a broad array of cellular responses, such as survival, cell proliferation, and apoptosis. Activation of a MAPK cascade requires dual phosphorylation on multiple levels: the phosphorylation of a MAP kinase kinase kinase (MKKK or MEKK) triggers the Ser/Thr phosphorylation of a MAP kinase kinase (MKK or MEK), which in turn catalyzes the Tyr/Thr phosphorylation of a MAP kinase.

The JNK (c-Jun N-terminal kinase, also known as stress-activated protein kinase, SAPK) family of kinases is activated in response to environmental stresses, including ionizing radiation, heat shock, oxidative stress, osmotic shock, cytokine signaling, and vascular cues.¹ MKK4 and MKK7 are upstream activators of JNK; downstream signaling targets include the transcription factor AP-1 (activator protein-1).

REFERENCES

1. Kyriakis JM. *J Biol Chem* 274(9):5259-5262, 1999.

RELATED PRODUCTS

Product	Clone/PAD*	Cat. No.
Mouse anti-JNK1	4A2G12	35-9800
Rabbit anti-JIP 1 (N-term)	ZMD.176	34-5200
Rabbit anti-JIP 1/2 (SH3)	ZMD.177	34-5300
Mouse anti-MEK1	3D9	13-3500
Rabbit anti-phospho-MEK1/2 (Ser218/222)	PD218	36-8400
Rabbit anti-MEKK1	ZK1	51-3400
Mouse anti-MKK3	4G11D7	32-6900
Mouse anti-MKK6	5C8E10	32-7100
Mouse anti-MKK7	2E3G1	32-7000
Mouse anti-p38- α MAP Kinase	p38-3F11	33-1300
Mouse anti-p38- β MAP Kinase	p38-11A5	33-8700
Rabbit anti-phospho-p38 MAPK (Thr180/Tyr182)	Polyclonal	36-8500
Mouse anti-ERK1	ERK-6B11	13-8600
Mouse anti-ERK2	107	13-4800
Rabbit anti-ERK2	Polyclonal	71-1800
Mouse anti-ERK1+2	ERK-7D8	13-6200
Rabbit anti-ERK1+2	Polyclonal	61-7400
Rabbit anti-phospho-ERK1+2 (Thr202/Tyr204)	PD202	36-8800
Mouse anti-ERK3	ERK3-11D10	32-4100
Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose [®] 4B	10-1241

*PAD: Polyclonal Antibody Designation

Conjugate	ZyMAX[™] Goat x Rabbit IgG (H+L)	ZyMAX[™] Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy [™] 3	81-6115	81-6515
Cy [™] 5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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