



Qty: 100 µl – Sufficient for 10 miniblots

Rabbit anti-p38 MAPK [pTpY^{180/182}]

Catalog No. 36-8500

Lot No: See product label

Exp. Date: See product label

Rabbit anti-p38 MAPK [pTpY^{180/182}]

FORM

This polyclonal antibody is supplied as a 100 µl aliquot in 10mM Hepes (p.H 7.5), 150mM NaCl, 100 ug/ml BSA and 50% glycerol. The antibody is purified from rabbit antiserum using sequential chromatography on Protein A and phospho and dephospho peptide-affinity columns.

PAD: Polyclonal

IMMUNOGEN

Synthetic phosphopeptide corresponding to a region surrounding the phosphorylated Thr180/Tyr182 residues of p38 MAP kinase.

SPECIFICITY

This antibody is specific for 39kDa phospho-p38 MAP Kinase, phosphorylated at Thr180/Tyr182. Immunolabeling in Western blots of C-6 glioma cells prepared with anisomycin treatment is blocked by the phosphopeptide but not by the dephosphopeptide.

REACTIVITY

Reactivity has been confirmed with C-6 glioma cells. Based on amino acid sequence homology, cross-reactivity with rat and mouse is expected.

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 concentration ranges are recommended starting points for this product.

Western Blotting : 1 : 1,000

Dot Blot : 1 : 1,000

STORAGE

Store at –20°C

BACKGROUND

The p38 (CSBP, RK, or Mpk2) protein is the newest member of the MAP kinase family to be isolated^{1,2}. This protein was originally identified as a kinase phosphorylated on tyrosine in response to treatment of cells with LPS². Subsequently, p38 (CSBP1/CSBP2) was identified as the target of pyridinyl-imidazole compounds, which inhibit the production of interleukin-1 and tumor necrosis factor from stimulated human monocytes³. p38 and JNK appear to be activated by many of the same stimuli; nevertheless, differences in the extent and timing of activation of p38 and JNK have been observed⁴. p38 and JNK are activated by distinct MAPK kinases: MKK4 activates both JNK and p38, whereas MKK3 and MKK6 activate p38 specifically^{5,6}. Studies have implicated p38 in the phosphorylation of the small heat shock proteins Hsp27, MAPKAP kinase -2 and -3, and the transcription factors ATF2, Elk-1 and CHOP⁷. In addition, p38 likely mediates increased cytokine expression and some aspects of programmed cell death³. Phosphorylation of p38 MAPK associated with the activation of NFκB may be related to human crescentic glomerulonephritis⁸.

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REFERENCES

1. Davis RJ. *Trends Biochem Sci* 19:470-473, 1994.
2. Han J, et al. *Science* 265:808-811, 1994.
3. Lee JC, et al. *Nature* 372:739-746, 1994.
4. Raingeaud J, et al. *J Biol Chem* 270:7420-7426, 1995.
5. Derijard B, et al. *Science* 267:687, 1995.
6. Raingeaud J, et al. *Mol Cell Biol* 16:1247-1255, 1996.
7. Freshney NW, et al. *Cell* 78:1039-1049, 1994.
8. Sakai N, et al. *Nephrol Dial Transplant* 17(6):998-1004, 2002.

RELATED PRODUCTS

Product	Clone/PAD*	Cat. No.
Ms anti-p38- α MAP Kinase	p38-3F11	33-1300
Ms anti-p38- β 2 MAP Kinase	p38-11A5	33-8700
Ms anti-JNK 1	4A2G12	35-9800
Rb anti-phospho-JNK (Thr183/Tyr185)	PD183	36-9300
Ms anti-MKK3	4G11D7	32-6900
Ms anti-MKK6	5C8E10	32-7100
Ms anti-MKK7	2E3G1	32-7000
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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Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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