

Qty: 100 µg/200 µl

Mouse anti-p38-β2

Catalog No. 33-8700

Lot No. See product label

Mouse anti-p38-β2

FORM

This monoclonal antibody is supplied as a 200 µl aliquot at 0.5 mg/ml in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. The antibody is Protein-A purified from mouse ascites.

IMMUNOGEN

Recombinant, full-length human p38 β2; the product of the p38-β gene

CLONE: P38-11A5

ISOTYPE: This antibody reacts with both anti-IgG₁ specific antibodies and anti-IgG_{2a} specific antibodies.

SPECIFICITY

This monoclonal antibody is specific for the beta-isoform of p38. Cross-reactivity with other p38 isoforms (including p38-α, -δ, and -γ) has not been observed.

REACTIVITY

This antibody reacts with human and mouse p38-β2 proteins. Based on sequence homology, reactivity with other species is likely but has not been confirmed.

Sample	ELISA (Native)	Immuno-precipitation (native)*	Immuno-precipitation/kinase assay**	Western Blotting*
Human		+	-	+
Mouse		+	-	+
Immunogen	+++			

*Reactive confirmed with the following cell lines:

**This antibody is not suitable for use in IP/Kinase assays as it appears to inhibit kinase activity.

Antibody reactivity was confirmed by Western blotting and immunoprecipitation using COS cells transfected with a p38-beta expression vector. Reactivity with endogenous p38-β2 has also been observed in several cell lines.

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate dilutions will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. We recommend the following ranges as starting points for this product.

ELISA: 0.1 – 1.0 µg/ml
Immunoprecipitation: 5-10 µg/IP reaction
Western Blotting: 1-3 µg/ml

(continued)

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PI338700

(Rev 10/08) DCC-08-1089

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STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Avoid repeated freezing and thawing.

BACKGROUND^(1,2)

p38 (CSBP, RK, or Mpk2) is among the newest MAPK family members to be isolated. This protein was originally identified as a kinase which was phosphorylated on tyrosine in response to treatment of cells with LPS. Subsequently, p38 (CSBP1/CSBP2) was identified as the target of pyridinyl-imidazole compounds (eg: SB 203580) which inhibit the production of interleukin-1 and tumor necrosis factor from stimulated human monocytes. CSBP1 and CSBP2 are splice variants of p38 differing only in an internal 25 amino acid sequence. p38 and JNKs 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 observed. Further, p38 and JNKs are activated by distinct MAPK kinases. For example, MKK4 activates both JNK and p38, whereas MKK3 and MKK6 activate p38 specifically. 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 CHOP. In addition, p38 likely mediates increased cytokine expression and some aspects of programmed cell death.

GENERAL REFERENCES

1. Kumar, S., et al., *Biochem. Biophys. Res. Commun.* 235: 533-538 (1997).
2. Jiang Y., et al., *J. Biol. Chem.* 271: 17920-17926 (1996).

RELATED PRODUCTS

Product	Clone/PAD	Cat. No.
Ms x MAP Kinase (ERK1+ERK2)	ERK-7D8	13-6200
Rb x MAP Kinase (ERK1+ERK2)	poly	61-7400
Ms x p38 MAP Kinase	p38-3F11	33-1300
MAP Kinase Sampler Pack	6 Abs and controls	90-6200
Rb x Phosphoserine	Z-PS1	61-8100
Rb x Phosphothreonine	Z-PT1	71-8200
Ms x Phosphothreonine	PT-5H5	13-9200
anti-Phosphotyrosine	large selection	www.zymed.com

Product	Conjugate	Catalog No.
Goat anti-Mouse IgG (H+L) (ZyMAX™ Grade)	purified	81-6500
	FITC	81-6511
	TRITC	81-6514
	Cy™3	81-6515
	Cy™5	81-6516
	HRP	81-6520
	AP	81-6522
	Biotin	81-6540
rec-Protein G	Sepharose® 4B	10-1241
Protein A	Sepharose® 4B	10-1041

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