Qty: 200 µg/400 µl
Mouse anti-MAP Kinase
(ERK1 + ERK2)
Catalog No. 13-6200

Lot No. See product label

Mouse anti-MAP Kinase (ERK1 + ERK2)

INTENDED USE
For Research Use Only

This monoclonal antibody is supplied as a 400 µl aliquot at 0.5 mg/ml in phosphate buffered saline, pH 7.4, containing 0.1% sodium azide. The antibody is highly purified from mouse ascites by peptide-specific affinity chromatography.

CLONE: ERK-7D8 **ISOTYPE:** IgG_1 -kappa

IMMUNOGEN
Synthetic Peptide (a.a. 324-345) corresponding to a segment near the C-terminus of rat ERK1[1]

SPECIFICITY
This antibody reacts strongly with both ERK1 and ERK2. Reactivity has been confirmed by western blot analysis of extracts derived from human A431 and K562 cells, canine MDCK cells, mouse brain, rat brain, and recombinant ERK2.

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

ELISA:	0.1-1 µg/ml
Immunoprecipitation[7-9, 13, 14]**:**	2-5 µg/reaction
Western Blotting[1-8, 10-19]**:**	1 µg/ml
EMSA:	inquire

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 [20-22]
Mitogen Activated Protein Kinases (MAPKs) play pivotal roles in mediating signal transduction from the cell surface to the nucleus. These kinases are encoded by distinct genes and together form a family of kinases whose activation is dependent upon dual phosphorylation on specific threonine and tyrosine residues. In yeast, a number of different MAP Kinases have been identified and are activated by distinct signaling pathways. In mammalian cells, the best characterized sub-group of the MAP Kinase family are the Extracellular Signal Regulated Kinases (ERKs). To date, at least 4 distinct ERKs have been identified including: ERK1 (p44/p43), ERK2 (p42/p43), ERK3 (p62), and ERK4 (p45). Analysis of cDNAs encoding MAP Kinase suggest that numerous other ERKs may exist. MAP Kinase has been shown to phosphorylate numerous proteins including: RSK[2], c-Fos, c-Jun, c-Myc, c-raf, MAP2, and MEK[3]. MAP Kinase is directly activated when phosphorylated by MEK and indirectly stimulated by many factors[4,5,6].

(cont'd)

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RELATED PRODUCTS

Product	***Clone/PAD****	***Cat. No.***
Rb x MAP Kinase (ERK1+ERK2)	poly	61-7400
Ms x p38α MAP Kinase	p38-3F11	33-1300
Ms x p38β2 MAP Kinase	p38-11A5	33-8700
Ms x MAP Kinase (ERK1+ERK2)	ERK-7D8	13-6200
Rb x Raf-1	TRM-12	71-2600
Rb x Phosphoserine	Z-PS1	61-8100
Rb x Phosphothreonine	Z-PT1	71-8200
Ms x Phosphothreonine	PT-5H5	13-9200
anti-Phosphotyrosine	many	see www.zymed.com

PAD, Polyclonal Antibody Designation

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

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