



Qty: 100 µL

(Sufficient for 10 mini-blot)

Rabbit anti-phospho-ERK1+2 (Thr202/Tyr204)

Catalog No. 36-8800

Lot No.: See product label

Exp. Date.: See product label

Rabbit anti-phospho-ERK1+2 (Thr202/Tyr204)

FORM

This polyclonal antibody is supplied as a 100 µl aliquot in 10 mM Hepes solution (pH 7.5), 150mM NaCl, 100 µg/mL BSA, and 50% glycerol.

PAD: PD202

IMMUNOGEN

Synthetic phosphopeptide corresponding to the region surrounding the phosphorylated Thr202 and Tyr204 residues of ERK1+2 (p44/42 MAP kinase).

SPECIFICITY

This antibody is specific for ERK 1+2 when phosphorylated at Thr202 and Tyr204. On Western blots, it identifies two bands at ~42 and 44 kDa.

REACTIVITY

Reactivity has been confirmed with NGF-stimulated PC-12 cell lysates by Western blotting. No bands were observed in unstimulated PC-12 lysates.

Sample	Western Blotting	Immuno-histochemistry*
Rat	+++	ND
Human	ND	+++
Immunogen	N/A	N/A

(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 factor is recommended as a starting point for this product.

Western Blotting :	1:1,000
Dot Blot:	1:1,000

STORAGE

Store at -20°C

BACKGROUND

Mitogen activated protein kinase (MAPKs) mediate signal transduction cascades from the cell surface to the nucleus that are responsible for cell growth and differentiation. The activity of MAPK family members is dependent upon dual phosphorylation of threonine and tyrosine residues by an upstream kinase, MKK (or MEK). In mammals, three types of MAPK pathways have been identified: the ERKs (extracellular signal-related protein kinases), JNKs (c-Jun NH₂-terminal kinases), and p38 MAP kinases. Activation of a MAPK signaling cascade requires a minimum of three events: the phosphorylation of a MAP kinase kinase kinase (MKKK or MEKK) triggers the phosphorylation of a MAP kinase kinase (MKK or MEK), which in turn phosphorylates the MAP kinase.

ERKs are regulated by the binding of extracellular ligands to transmembrane receptors possessing intrinsic or associated tyrosine kinase activity. At least four distinct ERKs have been identified, including ERK1 (p44), ERK2 (p42), ERK3 (p62), and ERK4 (p45). In humans, activation of MAP kinase (ERK1+ERK2) requires phosphorylation by MEK at Thr202 and Tyr204.¹

REFERENCES

1. Payne DM, et al. *EMBO J* 10(4):885-892, 1991.

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





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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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