Biaffin GmbH & Co KG
Reagents, chemicals and proteins for
exploring cellular signalling networks

ERK2/MAPK1, active
human recombinant, expressed in E.coli, N-His-fusion protein

Lot Nr. 010404

Material for in vitro research use only. Not for pharmaceutical or drug application.
Material does not contain any animal products such as albumin.

Description

Purified recombinant human ERK2/MAPK1 ($p42^{MAPK}$), expressed in E.coli. Highly active form produced by phosphorylation of the purified ERK2/MAPK1 in vitro with MEK1 followed by subsequent affinity chromatography. Suitable for labeling ERK2/MAPK1 substrates. Features a polyhistidine tag to facilitate removal of the enzyme from the reaction mixture. Sequence based calculated Mw 44,556.

Quality

Protein concentration (Bradford with BSA as standard)	0.16 mg/ml
Purity	> 95% by SDS PAGE
Specific activity	178.400 Units*/mg
Protease activity (Twinning test)	None

* 1 Unit is defined as 1 picomole phosphate transferred to myelin basic protein per min at 30 °C

Form

Liquid. In 50 mM Tris-HCl, 150 mM NaCl, 1 mM DTT, 50 % glycerol, pH 8.5.

Package size: 5 µg

Storage conditions: -70 °C

Shipment conditions: dry ice

AVOID FREEZE/THAW CYCLES.

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Product specific literature references

- Gonzalez FA, Raden DL, Davis RJ (1991) "Identification of substrate recognition determinants for human ERK1 and ERK2 protein kinases" J. Biol. Chem. 266(33):22159-63

- Haycock JW, Ahn NG, Cobb MH, Krebs EG (1992) "ERK1 and ERK2, two microtubule-associated protein 2 kinases, mediate the phosphorylation of tyrosine hydroxylase at serine-31 in situ" Proc. Natl. Acad. Sci. U S A. 89(6):2365-9

- Volente C, Angelastro JM, Greene LA (1993) "Association of protein kinases ERK1 and ERK2 with p75 nerve growth factor receptors" J. Biol. Chem. 268(28):21410-5

- Veeranna, Amin ND, Ahn NG, Jaffe H, Winters CA, Grant P, Pant HC (1998) "Mitogen-activated protein kinases (Erk1,2) phosphorylate Lys-Ser-Pro (KSP) repeats in neurofilament proteins NF-H and NF-M" J. Neurosci. 18(11):4008-21