MONOCLONAL ANTIBODY



Anti- ERK1/2(3A1)

Background: ERK1 and ERK2 are widely expressed and are involved in the regulation of meiosis, mitosis, and postmitotic functions in differentiated cells. Many different stimuli, including growth factors, cytokines, virus infection, ligands for heterotrimeric guanine nucleotide binding protein (G protein)-coupled receptors and transforming agents, activate the ERK1 and ERK2 pathways.

When growth factors bind to the receptor tyrosine kinase, Ras interacts with Raf, the serine/threonine protein kinase, and activates it as well. Once actived, Raf phosphorylates other two kinases, MEK1/2, which in turn phosphorylates tyrosine/threonine in ERK 1/2. Upon activation, the ERKs either phosphorylate a number of cytoplasmic targets or migrate to the nucleus, where they phosphorylate and activate a number of transcription factors such as c-Fos and Elk-1.

Immunogen: His-tagged recombinant human ERK1 protein purified from *E.coli*

Host: Mouse

Clone number: 3A1

Isotype: IgG1, k

Size: 100 μℓ

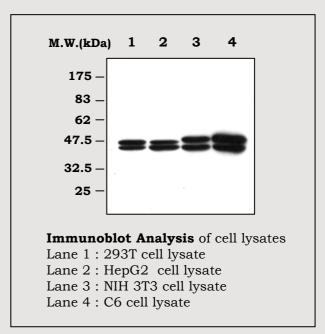
Compositon: Hepes with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50%

glycerol

Positive control: HepG2 cell lysate

Storage: Store for 1 year at -20°C from date of shipment

Species cross reactivity		
Human	Mouse	Rat
+	+	+



Applications:

ELISA

Western blotting(1: 2,000)

Background Reference:

- 1) Smalley, K. Int. J. Cancer 2003: vol.104; p.527-32
- 2) Johnson, G.L. and Lapadat, R. Science, 2002:
- vol.298; p.1911-2
- 3) Kolch, W. Biochem. J. 2000: vol.351; p.289-305

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