## Anti-Erk1(33A5)

Background : ERK1 and ERK2 are widely expressed and are involved in the regulation of meiosis, mitosis, and post-mitotic 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 : Recombinant human protein purified from E.coli (His-Erk1)

Host : Mouse
Clone number : 33A5
Isotype : IgG2a, k
Size : 100ul
Composition : Hepes with $0.15 \mathrm{M} \mathrm{NaCl}, 0.01 \%$ BSA, $0.03 \%$ sodium azide, and $50 \%$ glycerol

Positive control : 293T cell lysate
Storage : Store for 1 year at $-20^{\circ} \mathrm{C}$ from date of shipment


## Applications :

ELISA
Western Blotting $(1: 2,000)$

## Background Reference :

1) Smalley, K. Int. J. Cancer 2003: vol.104; p.52732
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
