

Anti-Phospho-ERK1/2 (Thr202/Tyr204) Antibody

CATALOG NO:	A1589-100
ALTERNATIVE NAMES:	Mitogen-activated protein kinase 3, MAP kinase 3, MAPK 3, ERK-1, Extracellular signal-regulated kinase 1, ERK-1
AMOUNT:	100 µg
IMMUNOGEN:	A synthesized peptide derived from human ERK1/2 around the phosphorylation site of Threonine 202/Tyrosine 204
HOST/ISOTYPE:	Rabbit IgG
CLONALITY:	Polyclonal
MOL WEIGHT:	44 kDa
SPECIES REACTIVITY:	Human, Mouse, Rat
PURIFICATION:	Affinity purification
FORM:	Liquid
FORMULATION:	In phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol
STORAGE CONDITIONS:	For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles
DESCRIPTION:	Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade plays also a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. About 160 substrates have already been discovered for ERKs. Many of these substrates are localized in the nucleus, and seem to participate in the regulation of transcription upon stimulation. However, other substrates are found in the cytosol as well as in other cellular organelles, and those are responsible for processes such as translation, mitosis and apoptosis.
APPLICATION:	WB; 1:500 – 1:2000 IHC; 1:50- 1:200 IF; 1-200 Note: This information is only intended as a guide. The optimal dilutions must be determined by the user.

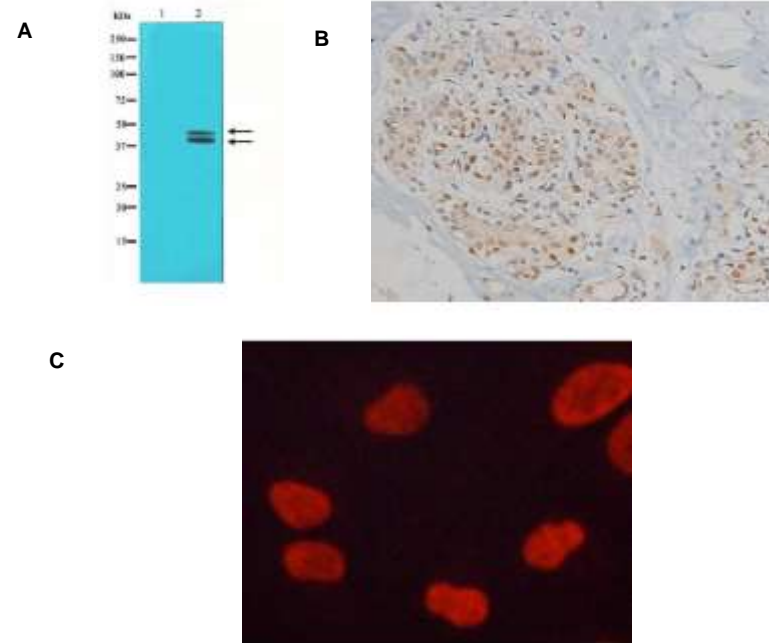


Fig. A. Western blot analysis of ERK1/2 phosphorylation expression in HeLa whole cell lysates. The lane on the left is treated with the antigen-specific peptide.

Fig. B Immunohistochemical analysis of formalin-fixed, paraffin-embedded human Small Intestinal Carcinoma stained with Anti-Phospho-ERK1/2 (Thr202/Tyr204) Antibody

Fig. C. Immunofluorescence analysis of cells Phospho-ERK1/2 (Thr202/Tyr204) Antibody in lovo cells

RELATED PRODUCTS:

- Phospho-Erk1/2 Antibody (**Cat. No. 3441**)
- Phospho-ERK1/2 (Thr202/Tyr204) Translocation Assay Kit (Cell-Based) (**Cat. No. K696**)

FOR RESEARCH USE ONLY! Not to be used on humans.