

## Monoclonal Antibody to ERK1 / ERK2 (pT-E-pY Motif) - Aff - Purified

<b>Alternate names:</b>	ERK-1/ERK-2, Extracellular signal regulated kinase 1/2, Insulin stimulated MAP2 kinase, MAPK1/MAPK2, Microtubule associated protein 2 kinase, Mitogen activated protein kinase 1/2/3, P42/P44-MAPK
<b>Catalog No.:</b>	AP10013PU-N
<b>Quantity:</b>	0.1 ml
<b>Concentration:</b>	4.0 mg/ml
<b>Background:</b>	ERK (extracellular signal-regulated kinase), also known as MAPK (mitogen-activated protein kinase) has two closely related isoforms of 44 kDa and 42 kDa, respectively. These kinases belong to a family of serine/threonine kinases that are activated upon treatment of cells with a large variety of stimuli including mitogens, hormones, growth factors, cytokines, and bioactive peptides. Cell stimulation induces the activation of a signalling cascade, the downstream effects of which have been linked to the regulation of cell growth and differentiation as well as the cytoskeleton. ERK 1 and ERK 2 are fully activated by phosphorylation within a Thr-Glu-Tyr motif of the activation loop on both a threonine and a tyrosine residue by MEKs (MAPK/ERK kinases), thereby greatly elevating the activity of the ERK 1 + 2 enzymes
<b>Host:</b>	Rabbit
<b>Clone:</b>	G15-B
<b>Immunogen:</b>	Peptide derived from the protein area including conserved pT-E-pY motif of activated Erk 1,2.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction. <b>Purification:</b> Immunoaffinity Chromatography. <b>Buffer System:</b> 20 mM Tris-HCl, pH 8.0 containing 0.05% Sodium Azide as preservative and 10 mg/ml BSA as stabilizer. <b>Note:</b> This antibody is also available without Stabilizer.
<b>Applications:</b>	Immunohistochemistry (Frozen Sections, Fixed, Paraffin-Embedded Sections). Immunoprecipitation. Western blot (1/5,000) <u>Wash buffer:</u> 1x Tris Buffered Saline (TBS); 0.1% Triton X-100 <u>Blocking buffer:</u> 1xTBS; 0.1% Triton X-100; 5% BSA (used with the primary antibody). Incubate the membrane with antibody diluted in blocking buffer 2 hours at room temperature. ELISA (1/20,000-1/100,000). Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

### Specificity:

This antibody recognises Erk 1,2  
**Species:** Human, Mouse and Rat.  
 Other species not tested.

### Storage:

Store the antibody undiluted (in aliquots) at -20°C.  
 Avoid repeated freezing and thawing.  
 Shelf life: one year from despatch.

### Pictures:

**Figure 1.** Western blot analysis of Erk 1,2 activation in untreated PC12 cells (A), cells treated with EGF-100 ng/ml, 5 min (B), PMA-100 nM, 30 min (C) in serum free DMEM, and EGF-100 ng/ml, 5 min with 10% FBS in DMEM (D). Wells were equally loaded with 50 ug of whole cell lysate Proteins/well. *kindly provided by Dr. Martina Taka.ova from Intitute of Virology, Slovak Academy of Sciences, Bratislava Slovakia.*

