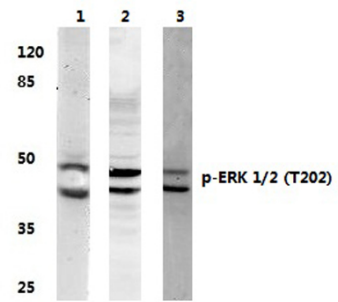


**AP20845PU-N****Polyclonal Antibody to ERK1 / ERK2 pThr202 - Aff - Purified**

<b>Alternate names:</b>	ERK-1/ERK-2, Extracellular signal-regulated kinase, Insulin-stimulated MAP2 kinase, MAPK1/MAPK2, Mitogen-activated protein kinase, P42/P44-MAPK
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	The activation of signal transduction pathways by growth factors, hormones and neurotransmitters is mediated through two closely related MAP kinases, p44 and p42, designated extracellular-signal related kinase 1 (ERK 1) and ERK 2, respectively. ERK proteins are regulated by dual phosphorylation at Tyrosine 204 and 187 and Threonine 177 and 160 residues mapping within a characteristic Thr-Glu-Tyr motif. Phosphorylation at both the Threonine 202 and Tyrosine 204 residues of ERK 1 and Threonine 185 and Tyrosine 187 residues of ERK 2 is required for full enzymatic activation. The structural consequences of dual phosphorylation in ERK 2 include active site closure, alignment of key catalytic residues that interact with ATP, and remodeling of the activation loop. In response to activation, MAP kinases phosphorylate downstream components on serine and threonine.
<b>Host:</b>	Rabbit
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction <b>Purification:</b> Affinity chromatography (> 95% (by SDS-PAGE) <b>Buffer System:</b> Phosphate buffered saline (PBS), pH 7.2. <b>Preservatives:</b> 0.05% sodium azide
<b>Applications:</b>	<b>Western blot:</b> 1/500 - 1/1000. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Molecular Weight:</b>	~ 44,42 kDa
<b>Specificity:</b>	This antibody detects endogenous levels of p-ERK 1/2 protein only when phosphorylated at Thr202.
<b>Species Reactivity:</b>	<b>Tested:</b> Human. <b>Expected from sequence similarity:</b> Mouse and Rat.
<b>Storage:</b>	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**Pictures:**

**Western blot (WB) analyzes of p-ERK 1/2 antibody (Cat.-No.: AP20845PU-N)**



Lane1: HepG2 Whole cell lysate treated with Ips  
 Lane2: raw264.7 whole cell lysate treated with H2O2  
 Lane3: H9C2 whole cell lysate treated with PMA  
 p-ERK 1/2 (T202) pAb at 1:500 dilution