

AP02499PU-S**Polyclonal Antibody to p44/42 MAP Kinase pTyr204 - Aff - Purified**

Alternate names:	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
Quantity:	50 µg
Concentration:	1.0 mg/ml
Background:	Both p44 and p42 MAP kinases (Erk1 and Erk2) function in a protein kinase cascade that plays a critical role in the regulation of cell growth and differentiation. Activation of MAP kinases occurs through phosphorylation of threonine and tyrosine (202 and 204 of human MAP kinase [Erk1] or 183 and 185 of rat Erk2) at the sequence T*EY* by a single upstream MAP kinase kinase (MEK). Both kinases are known to weakly autophosphorylate on tyrosine.
Host:	Rabbit
Immunogen:	The antiserum was produced against synthesized phosphopeptide derived from Human p44/42 MAP Kinase around the phosphorylation site of Tyrosine 204 (T-E-Yp-V-A).
Format:	State: Liquid purified Ig fraction. Purification: Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site. Buffer System: PBS (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide as preservative and 50% Glycerol as stabilizer.
Applications:	Western Blot: 1/500~1/1000. Immunohistochemistry: 1/50~1/100. Immunofluorescence: 1/100~1/200. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody detects endogenous levels of p44/42 MAP Kinase only when phosphorylated at Tyrosine 204. Species: Human, Mouse and Rat. Other species not tested.
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: One year from despatch.
Protocols:	1. TETE HANNKEN, et al. (2000) Am Soc Nephrol 11:1387-1397 2. Omar D. PerezNature et al. (2002) Biotechnology 20: 155 - 162 3. Jingui Yu, et al. (2005) Anesth Analg 101: 315-321 4. Hironobu Ihn et al.(2000) Immunology 165: 2149-2155

Pictures:

Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using p44/42 MAP Kinase antibody (AP02499PU).

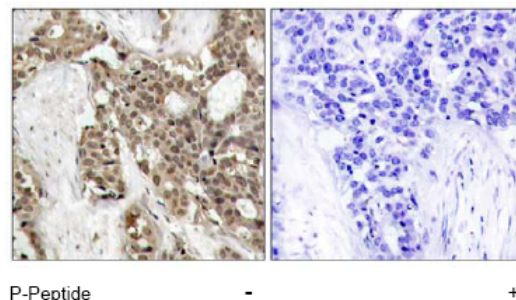


Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells showing centrosome and nuclear staining using p44/42 MAP Kinase (phospho-Tyr204) antibody (AP02499PU).

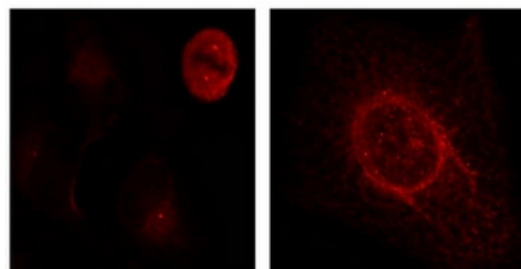


Figure 2. Western blot analysis of extracts from NIH-3T3 cells, using p44/42 MAP Kinase antibody (Line 1 and 2) and p44/42 MAP Kinase (pTyr204) antibody (AP02499PU, Line 3 and 4).

