

Product datasheet for **AP02499PU-S**

ERK1 / ERK2 pThr187/pTyr204 Rabbit Polyclonal Antibody

Product data:

| | |
|------------------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | IF, IHC, WB |
| Recommended Dilution: | Western Blot: 1/500~1/1000. Immunohistochemistry: 1/50~1/100. Immunofluorescence: 1/100~1/200. |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| 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). |
| Specificity: | This antibody detects endogenous levels of p44/42 MAP Kinase only when phosphorylated at Tyrosine 204. |
| Formulation: | PBS (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide as preservative and 50% Glycerol as stabilizer. State: Aff - Purified State: Liquid purified Ig fraction. |
| Concentration: | lot specific |
| Purification: | Affinity Chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site. |
| Conjugation: | Unconjugated |
| Storage: | Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: One year from despatch. |



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.

Synonyms: ERK-1/ERK-2, MAPK1/MAPK2, P42/P44-MAPK

Note: Protocol: 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

Product images:

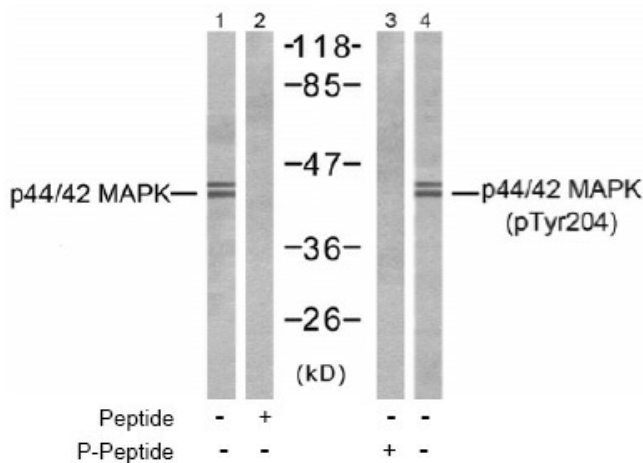


Figure 2. Western blot analysis of extracts from NIH-3T3 cells, using p44/42 MAP Kinase antibody (Line 1 and 2) and p44/42 MAP Kinase (pTyr204) antibody (AP02499PU, Line 3 and 4).

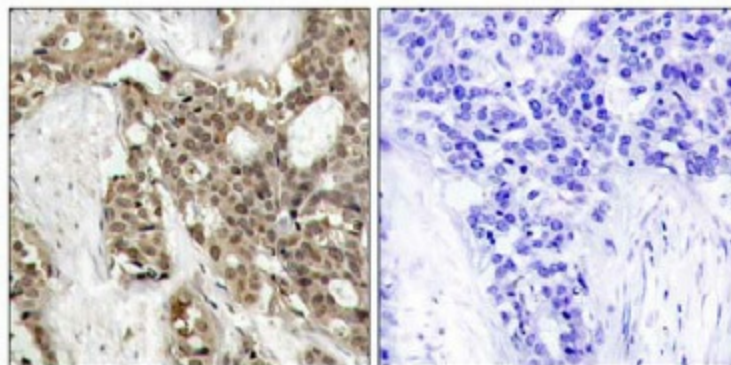


Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using p44/42 MAP Kinase antibody (AP02499PU).

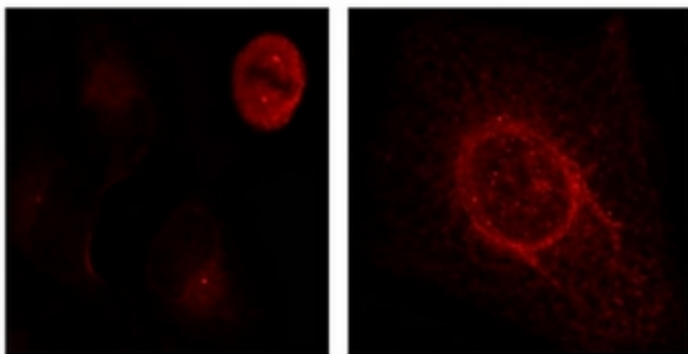


Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells showing centrosome and nuclear staining using p44/42 MAP Kinase (phospho-Tyr204) antibody (AP02499PU).