

PRODUCT DATA SHEET



Bioworld Technology, Inc.

p-ERK1/2 (Y204) pAb

Cat No.: BS4621

Host: Rabbit

Reactivity: Human, Mouse, Rat

BACKGROUND

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. Upstream MAP kinase regulators include MAP kinase kinase (MEK), MEK kinase and Raf-1. The ERK family has three additional members: ERK 3, ERK 5 and ERK 6.

PRODUCT

1 mg/ml in Phosphate buffered saline (PBS) with 0.05

Molecular Weight

~44,42 kDa

PURIFICATION & PURITY

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

APPLICATIONS

WB: 1:500 ~ 1:1000

IHC: 1:50 ~ 1:200

IF: 1:50 ~ 1:200 (Recommended Dilutions)

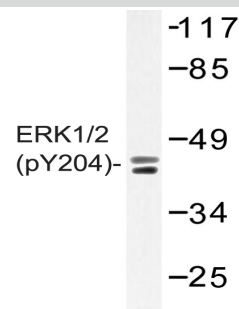
STORAGE & STABILITY

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

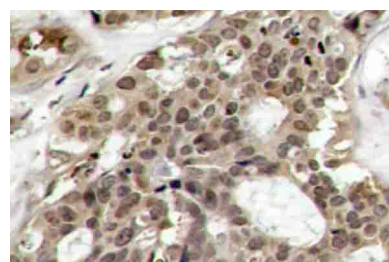
SPECIFICITY

p-ERK1/2 (Y204) pAb detects endogenous levels of ERK1/2 protein when phosphorylated at Tyr204.

DATA



Western blot (WB) analysis of p-ERK1/2 (Y204) pAb in extracts from HeLa cells treated with PMA.



Immunohistochemistry (IHC) analyzes of p-ERK1/2 (Y204) pAb in paraffin-embedded human breast carcinoma tissue.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

Bioworld Technology, Inc.

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