

**ERK1/2 (Y204) polyclonal antibody**

Catalog: BCP00749

Host: Rabbit

Reactivity: Human,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 ERK1 and Threonine 185 and Tyrosine 187 residues of ERK2 is required for full enzymatic activation. The structural consequences of dual-phosphorylation in the ERK2 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:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

**Molecular Weight:**

~ 42, 44 kDa

**Swiss-Prot:**

P27361/P28482

**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: 1:1000~1:2000

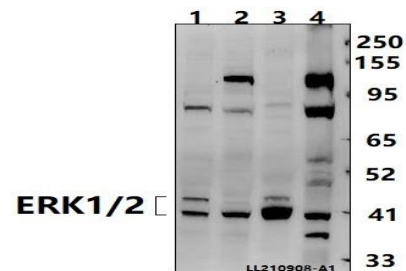
IF: 1:50~1:200

**Storage&Stability:**

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

**Specificity:**

ERK1/2 (Y204) polyclonal antibody detects endogenous levels of ERK1/2 protein.

**DATA:**

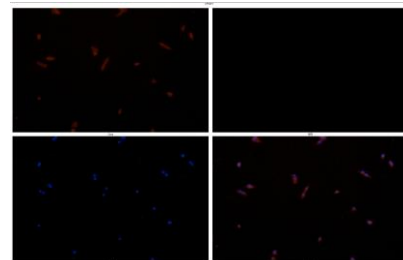
Western blot (WB) analysis of ERK1/2 (Y204) pAb at 1:1000 dilution

Lane1:C6 whole cell lysate(40ug)

Lane2:A549 whole cell lysate(40ug)

Lane3:The Brain tissue lysate of Rat(40ug)

Lane4:K562 whole cell lysate(40ug)



Immunofluorescence analysis of C6 cells using ERK1/2 (Y204) anti-body at dilution of 1:50.

**Note:**

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