

ERK1/2 (Y204) polyclonal antibody

Catalog: BCP00748

Host: Rabbit

Reactivity: Human, Mouse, Rat

BackGround:

Mitogen-activated protein kinases (MAPKs) are a widely conserved family of serine/threonine protein kinases involved in many cellular programs, such as cell proliferation, differentiation, motility, and death. The p44/42 MAPK (Erk1/2) signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines, and research investigators consider it an important target in the diagnosis and treatment of cancer. Upon stimulation, a sequential three-part protein kinase cascade is initiated, consisting of a MAP kinase kinase kinase (MAPKKK or MAP3K), a MAP kinase kinase (MAPKK or MAP2K), and a MAP kinase (MAPK). Multiple p44/42 MAP3Ks have been identified, including members of the Raf family, as well as Mos and Tpl2/COT. MEK1 and MEK2 are the primary MAPKKs in this pathway. MEK1 and MEK2 activate p44 and p42 through phosphorylation of activation loop residues Thr202/Tyr204 and Thr185/Tyr187, respectively. Several downstream targets of p44/42 have been identified, including p90RSK and the transcription factor Elk-1. p44/42 are negatively regulated by a family of dual-specificity (Thr/Tyr) MAPK phosphatases, known as DUSPs or MKPs, along with MEK inhibitors, such as U0126 and PD98059.

Product:

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

Molecular Weight:

~ 42, 44 kDa

Swiss-Prot:

P27361

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

IP: 1:50~1:200

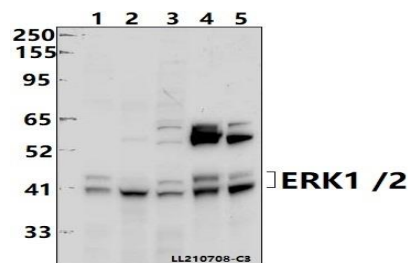
IHC:1:50~1:200

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) polyclonal antibody at 1:1000 dilution

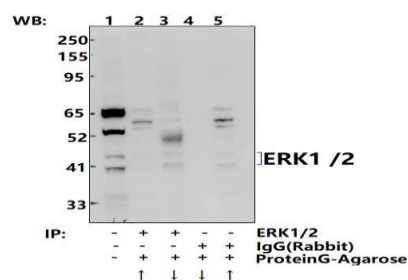
Lane1:HEK293T whole cell lysate(40ug)

Lane2:Jurkat whole cell lysate(40ug)

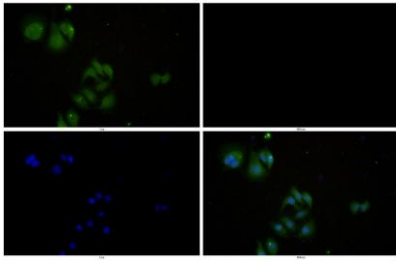
Lane3:A549 whole cell lysate(40ug)

Lane4:The Spinal cord tissue lysate of Rat(40ug)

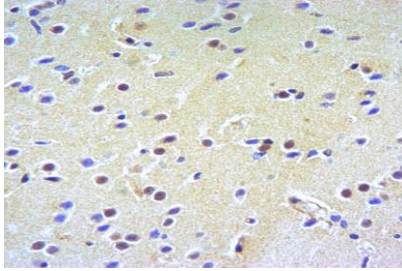
Lane5:The Brain tissue lysate of Mouse(40ug)



Immunoprecipitation of C6 cell lysates using ERK1/2 (Y204) pAb (Sepharose Bead Conjugate)#BD0048 (lane 2 and lane 3) and Nonspecific IgG Control (Sepharose Bead Conjugate)#BD0048 (lane 4 and lane 5). Lane 1 is 30% input. The western blot was probed using ERK1/2 (Y204) pAb.



Immunofluorescence analysis of A549 cells using ERK1/2 (Y204) antibody at dilution of 1:50.



Immunohistochemistry of paraffin-embedded Human Brain using ERK1/2 (Y204) antibody at dilution of 1:50.

Note:

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