ERK 1/2 (phospho-T202) polyclonal antibody

Catalog: BS4759 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:

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: 1:500~1:1000

IF: 1:100~1:500

IP: 1:50~1:200

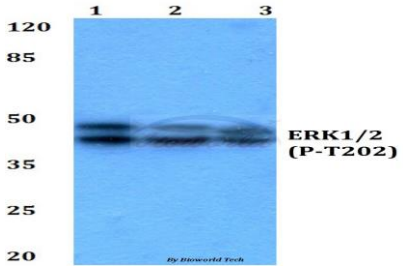
Storage&Stability:

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

Specificity:

p-ERK 1/2 (T202) polyclonal antibody detects endogenous levels of ERK 1 protein only when phosphorylated at Thr202, and ERK 1 protein only when phosphorylated at Thr185.

DATA:

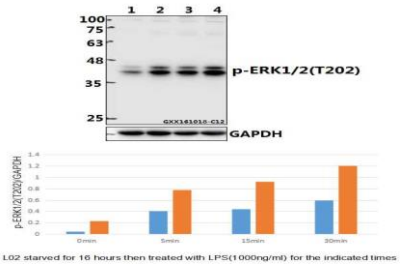


Western blot (WB) analysis of p-ERK 1/2 (T202) polyclonal antibody at 1:500 dilution

Lane1:Hela cell lysate treated with PMA(100nM,15mins)

Lane2:H9C2 cell lysate treated with PMA(100nM,15mins)

Lane3:PC12 cell lysate treated with PMA(100nM,15mins)



Western blot (WB) analysis of p-ERK1/2 (T202) pAb at 1:500 dilution

Lane1:L02 starved for 16 hours whole cell lysate(40ug)

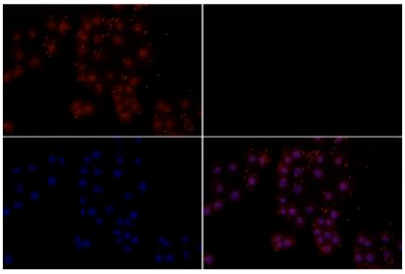
Lane2:L02 starved for 16 hours then treated with LPS(1000ng/ml) for 5 minutes whole cell lysate

Lane3:L02 starved for 16 hours then treated with LPS(1000ng/ml) for 15 minutes whole cell lysate

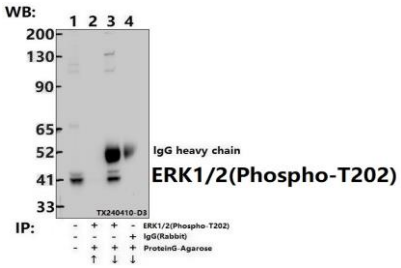
Lane4:L02 starved for 16 hours then treated with LPS(1000ng/ml) for 30 minutes whole cell lysate

Bioworld Technology, Inc.
Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416,USA.
Email: info@bioworlde.com
Tel: 6123263284
Fax: 6122933841

Bioworld technology, co. Ltd.
Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.
Email: info@biogot.com
Tel: 0086-025-68037686
Fax: 0086-025-68035151



Immunofluorescence analysis of Hela cells using ERK 1/2 (phospho-T202) pAb at dilution of 1:200 (40x lens).



Immunoprecipitation of Jurkat(Calyculin A 50nM, 30min) cell lysates using ERK 1/2 (phospho-T202) pAb (Sepharose Bead Conjugate)#BD0048 (lane 2 and lane 3) and Nonspecific IgG Control (Sepharose Bead Conjugate)#BD0048 (lane 4) .Lane 1 is 30% input. The western blot was probed using ERK 1/2 (phospho-T202) pAb.

Note:

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

Bioworld Technology, Inc.
Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416,USA.
Email: info@bioworlde.com
Tel: 6123263284
Fax: 6122933841

Bioworld technology, co. Ltd.
Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.
Email: info@biogot.com
Tel: 0086-025-68037686
Fax: 0086-025-68035151