OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for TA392537

Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:500~1:1000 IHC: 1:50~1:200 IF: 1:50~1:200
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic phosphopeptide derived from human ERK1/2 around the phosphorylation site of Tyrosine 204.
Specificity:	p-ERK1/2 (Y204) polyclonal antibody detects endogenous levels of ERK1 protein when phosphorylated at Tyr204, and ERK2 protein when phosphorylated at Tyr187.
Formulation:	Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2
Concentration:	1mg/ml
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Stability:	1 year
Predicted Protein Size:	~ 42,44 kDa
Database Link:	P27361/P28482

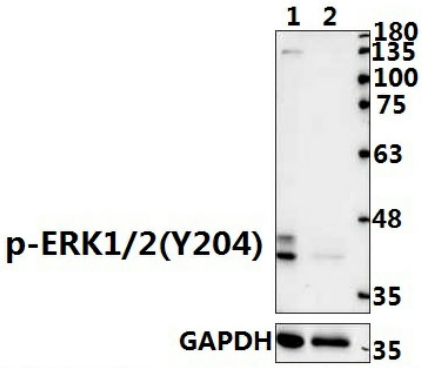
View online »

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.

Synonyms: ERK-1; ERK-2; ERK1; ERK2; ERT1; ERT2; Extracellular signal-regulated kinase 1; Extracellular signal-regulated kinase 2; Insulin-stimulated MAP2 kinase; MAPK1; MAPK 1; MAPK 2; MAPK 3; MAPK3; MAP kinase 1; MAP kinase 2; MAP kinase 3; MAP kinase isoform p42; MAP kinase isoform p44; Microtubule-associated protein 2 kinase; Mitogen-activated protein kinase 1; Mitogen-activated protein kinase 2; Mitogen-activated protein kinase 3; p42-MAPK; p44-ERK1; p44-MAPK; PRKM1; PRKM2; PRKM3

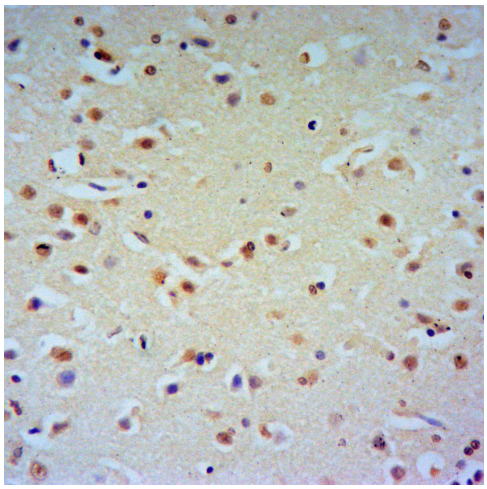
Note: For research use only, not for use in diagnostic procedure.

Product images:

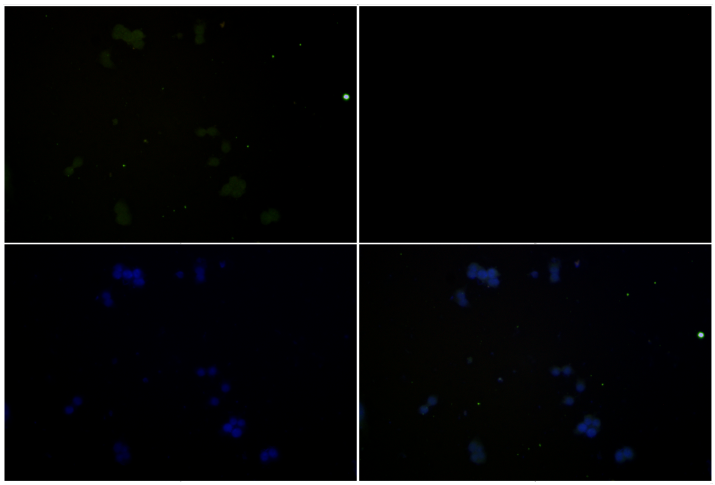


Western blot analysis of p-ERK1/2 (Y204) pAb#AP0490 at 1:500 dilution use L02 whole cell lysate (treated with 1000ng/ml LPS for 15 minutes) , untreated(lane1) or treated with λ-PPase(lane2)

LO2 cell, treated with LPS(1000ng/ml) for 15 miniutes, untreated or λ phosphatase-treated.The western blot was probed using p-ERK1/2 (Y204) pAb #TA392537 at 1:500 dilution.



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



Immunofluorescence analysis of HEK293T cells using p-ERK1/2 (Y204) antibody at dilution of 1:50.