

Erk1(pT202/pY204)+Erk2(pT185/pY187) Rabbit mAb

Catalog No: #13377

Package Size: #13377-1 50ul #13377-2 100ul

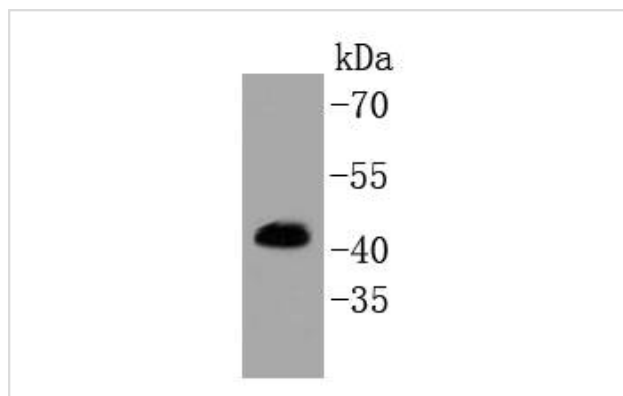
Description

Product Name	Erk1(pT202/pY204)+Erk2(pT185/pY187) Rabbit mAb
Host Species	Rabbit
Clonality	Monoclonal
Clone No.	SC58-01
Purification	ProA affinity purified
Applications	WB, IP
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Thr 202 and Tyr204 of human Erk1 + Thr 185 and Tyr187 of human Erk2.
Conjugates	Unconjugated
Accession No.	Swiss-Prot#:P27361
Calculated MW	42/44 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

WB: 1:1,000-1:2,000

Images



Western blot analysis of Erk1(pT202/pY204)+Erk2(pT185/pY187) on A431 lysates using anti-Erk1(pT202/pY204)+Erk2(pT185/pY187) antibody at 1/1,000 dilution.

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.

References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.