

Erk1/Erk2(Phospho-Thr202/185) Rabbit mAb

Catalog No: #13340

Package Size: #13340-1 50ul #13340-2 100ul

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Description

Product Name	Erk1/Erk2(Phospho-Thr202/185) Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	SZ2-4
Isotype	IgG
Purification	ProA affinity purified
Applications	WB;ICC/IF;IHC
Species Reactivity	Human
Immunogen Description	Synthetic phospho-peptide corresponding to residues surrounding Thr185 of human Erk2.
Conjugates	Unconjugated
Target Name	MK03
Other Names	ERK 1 antibody; ERK 2 antibody; ERK-1 antibody; ERK-2 antibody; ERK1 antibody; erk1/2 antibody; ERK2 antibody; ERT1 antibody; ERT2 antibody; Extracellular signal regulated kinase 1 antibody; Extracellular signal-regulated kinase 1 antibody; Extracellular signal-regulated kinase 2 antibody; HS44KDAP antibody; HUMKER1A antibody; Insulin-stimulated MAP2 kinase antibody; MAP kinase 1 antibody; MAP kinase 2 antibody; MAP kinase 3 antibody; MAP kinase isoform p42 antibody; MAP kinase isoform p44 antibody; MAPK 1 antibody; MAPK 2 antibody; MAPK 3 antibody; Mapk1 antibody; MAPK2 antibody; MAPK3 antibody; Microtubule-associated protein 2 kinase antibody; Mitogen-activated protein kinase 1 antibody; Mitogen-activated protein kinase 2 antibody; Mitogen-activated protein kinase 3 antibody; MK01_HUMAN antibody; p38 antibody; p40 antibody; p41 antibody; p41mapk antibody; p42-MAPK antibody; P42MAPK antibody; p44-ERK1 antibody; p44-MAPK antibody; p44ERK1 antibody; p44MAPK antibody; PRKM 2 antibody; PRKM1 antibody; PRKM2 antibody; PRKM3 antibody; protein tyrosine kinase ERK2 antibody
Accession No.	Swiss-Prot#:P27361
Calculated MW	41 kDa
SDS-PAGE MW	42,44kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

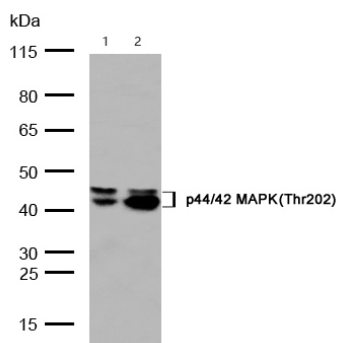
Application Details

WB: 1:500-1:2000

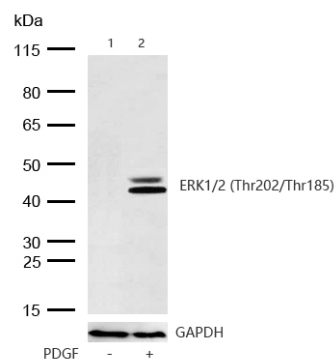
ICC/IF: 1:50-1:200

IHC: 1:50-1:200

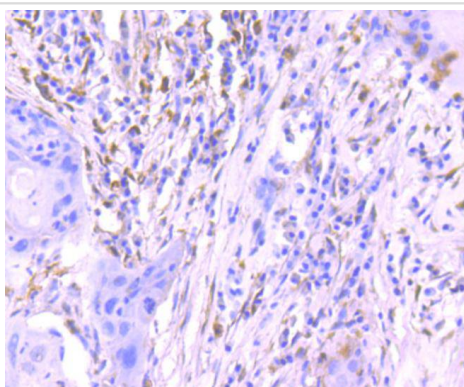
Images



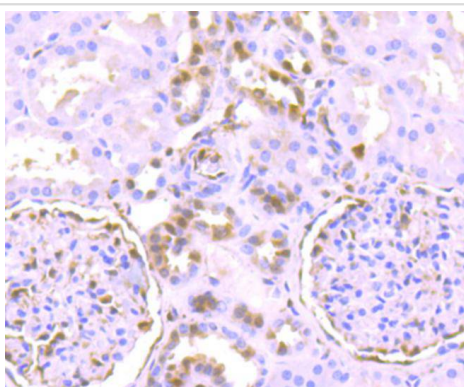
All lanes : Erk1/Erk2(Phospho-T202/T185) Rabbit mAb at 1/1k dilution
Lane 1 : C6 whole cell lysates Lane 2 : CHO-K1 whole cell lysates
Lysates/proteins at 20 µg per lane. Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution
Predicted band size: 41 kDa Observed band size: 42,44kDa
Exposure time: 4 seconds



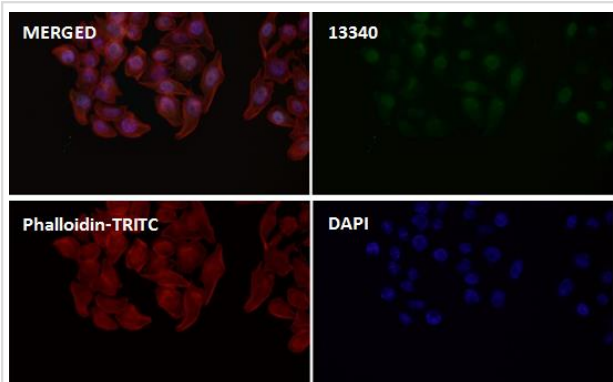
All lanes : Erk1/Erk2(Phospho-T202/T185) Rabbit mAb at 1/1k dilution
Lane 1 : 3T3 whole cell lysates Lane 2 : 3T3 treated with 100ng/mL PDGF for 10 minutes whole cell lysates
Lysates/proteins at 20 µg per lane. Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution
Predicted band size: 41 kDa Observed band size: 42,44kDa
Exposure time: 2 seconds



Formalin-fixed;paraffin-embedded human lung cancer tissue stained for Erk1(Phospho-T202)/Erk2(Phospho-T185) using 13340 at 1/100 dilution in immunohistochemical analysis.



Formalin-fixed;paraffin-embedded human kidney tissue stained for Erk1(Phospho-T202)/Erk2(Phospho-T185) using 13340 at 1/100 dilution in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence
Erk1(Phospho-T202)/Erk2(Phospho-T185) antibody (13340) ICC/IF staining of Erk1(Phospho-T202)/Erk2(Phospho-T185) in HeLa cells. Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100. Samples were incubated with 13340 at a working dilution of 1/100. The secondary antibody was Alexa FluorB 488 goat anti rabbit; used at a dilution of 1/500. The cells were incubated 30 minutes at room temperature with phalloidin tritc . Nuclei were counterstained with DAPI.

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.

References

1. Ruess DA et al. HDACi Valproic Acid (VPA) and Suberoylanilide Hydroxamic Acid (SAHA) Delay but Fail to Protect against Warm Hepatic Ischemia-Reperfusion Injury. PLoS One 11:e0161233 (2016).
2. Ahnstedt H et al. U0126 attenuates cerebral vasoconstriction and improves long-term neurologic outcome after stroke in female rats. J Cereb Blood Flow Metab 35:454-60 (2015).

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