Product Datasheet

ERK1/2 Rabbit mAb

Catalog No: #48616

Package Size: #48616-1 50ul #48616-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

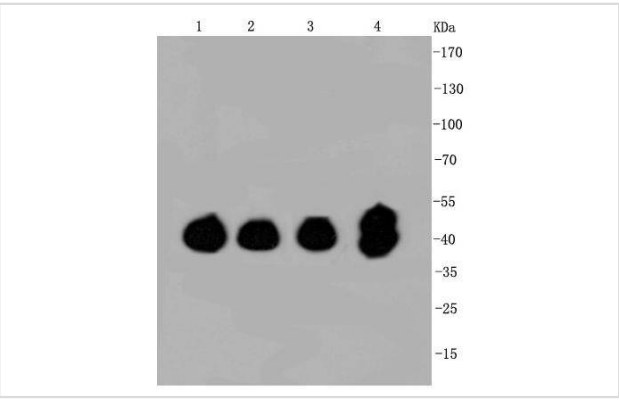
Description

Product Name	ERK1/2 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SA43-03
Purification	ProA affinity purified
Applications	WB, ICC/IF, IP, FC
Species Reactivity	Hu, Ms, Rt, zebrafish
Immunogen Description	recombinant protein
Other Names	ERK 1 antibody ERK 2 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 2 antibody MAP kinase 1 antibody MAP kinase 2 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 Mitogen-activated protein kinase 1 antibody Mitogen-activated protein kinase 2 antibody MK01_HUMAN antibody p38 antibody p40 antibody p41 antibody p42-MAPK antibody PRKM 2 antibody
Accession No.	Swiss-Prot#:P27361
Uniprot	P27361
GeneID	5595;
Calculated MW	42/44 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

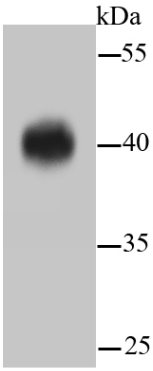
Application Details

WB: 1:1,000-5,000ICC: 1:50-1:200 FC: 1:50-1:100

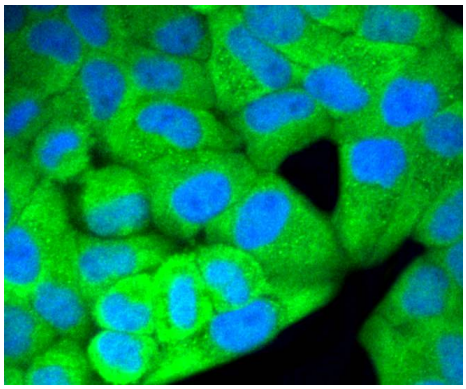
Images



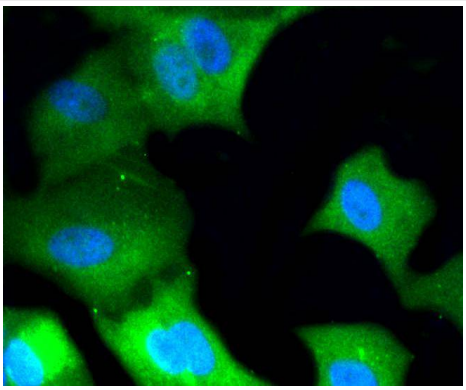
Western blot analysis of ERK1/2 on different cell lysates using anti-ERK1/2 antibody at 1/1,000 dilution. Positive control:
Lane 1: Hela
Lane 2: SW480
Lane 3: HCT116
Lane 4: PC12



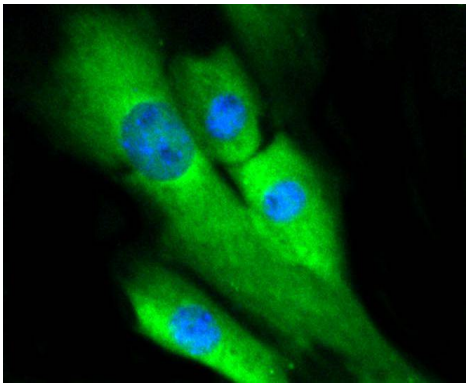
Western blot analysis of ERK1/2 on hybrid fish (crucian-carp) brain tissue lysate using anti-ERK1/2 antibody at 1/500 dilution.



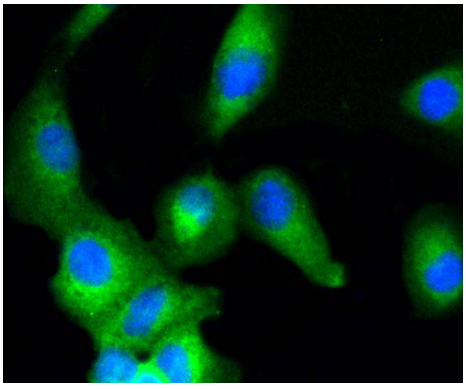
ICC staining ERK1/2 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



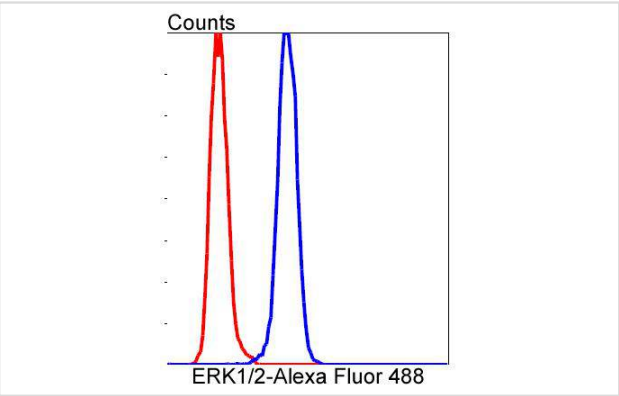
ICC staining ERK1/2 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



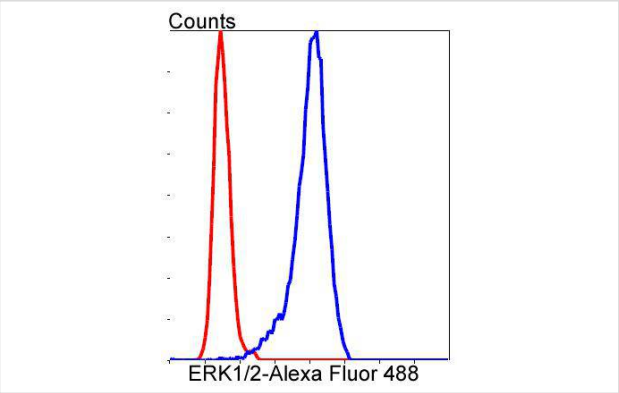
ICC staining ERK1/2 in NIH/3T3 cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining ERK1/2 in A549 cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with ERK1/2 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.



Flow cytometric analysis of SH-SY-5Y cells with ERK1/2 antibody at 1/50 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

Background

Mitogen-activated protein kinase (MAPK) signaling pathways involve two closely related MAP kinases, known as extracellular-signal-related kinase 1 (ERK 1, p44) and 2 (ERK 2, p42). Growth factors, steroid hormones, G protein-coupled receptor ligands and neurotransmitters can initiate MAPK signaling pathways. Activation of ERK 1 and ERK 2 requires phosphorylation by upstream kinases such as MAP kinasekinase (MEK), MEK kinase and Raf-1. ERK 1 and ERK 2 phosphorylation can occur at specific tyrosine and threonine sites mapping within consensus motifs that include the threonine-glutamate-tyrosine motif. ERK activation leads to dimerization with other ERKs and subsequent localization to the nucleus. Active ERK dimers phosphorylate serine and threonine residues on nuclear proteins and influence a host of responses that include proliferation, differentiation, transcription regulation and development. The human ERK 1 gene maps to chromosome 16p11.2 and encodes a 379 amino acid protein that shares 83% sequence identity to ERK 2. The human ERK2 gene maps to chromosome 22q11.21 and encodes a 360-amino acid protein.

References

Note: This product is for in vitro research use only