For Research Use Only

ERK1/2 Recombinant antibody

Catalog Number:83533-1-RR



Basic Information

Catalog Number: GenBank Accession Number: 83533-1-RR BC013992

Protein A purfication GeneID (NCBI): Size: CloneNo.: 1000 ug/ml

UNIPROT ID: Recommended Dilutions: Source: Rabbit P27361 WB 1:500-1:2000 IHC 1:50-1:500 Full Name: Isotype: IF/ICC 1:150-1:600 mitogen-activated protein kinase 3

Calculated MW: Immunogen Catalog Number:

AG20350 43 kDa

> Observed MW: 38-44 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with

TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: MCF-7 cells, Jurkat cells, HEK-293 cells, HepG2 cells, C6 cells, NIH/3T3 cells, rat brain tissue

Purification Method:

IHC: human cervical cancer tissue, human intrahepatic

cholangiocarcinoma tissue

IF/ICC : HeLa cells,

Background Information

ERK1 and ERK2 belongs to the protein kinase superfamily. It is involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK-1. ERK1/2 catalized the reaction: ATP + a protein = ADP + a phosphoprotein. It is activated by tyrosine phosphorylation in response to INS and NGF. This antibody can recognize both ERK1 and ERK2 with the molecular mass of 38-44 kDa.

Storage

Storage:

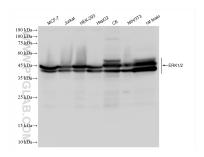
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

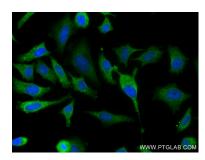
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

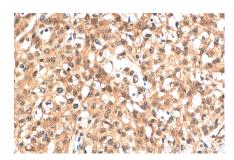
Selected Validation Data



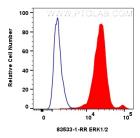
Various lysates were subjected to SDS PAGE followed by western blot with 83533-1-RR (ERK1/2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



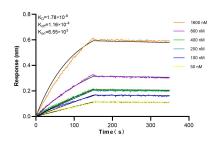
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using ERK1/2 antibody (83533-1-RR, Clone: 4P8) at dilution of 1:300 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1).



Immunohistochemical analysis of paraffinembedded human cervical cancer tissue slide using 83533-1-RR (ERK1/2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HepG2 cells were intracellularly stained with 0.25 ug ERK1/2 Recombinant antibody (83533-1-RR, Clone:4P8) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Control Antibody (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Biolayer interferometry (BLL) kinetic assays of 83533-1-RR against Human ERK1/2 were performed. The affinity constant is 17.8 nM.