For Research Use Only

Phospho-ERK1/2 (Thr202/Tyr204) Polyclonal antibody

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Catalog Number: 28733-1-AP

Featured Product

427 Publications

NM 002746

UNIPROT ID:

Full Name:

P27361

GeneID (NCBI):

GenBank Accession Number:

mitogen-activated protein kinase 3

Basic Information

Catalog Number:

28733-1-AP

Size:

100ul , Concentration: 600 ug/ml by Nanodrop:

Source:

Rabbit Isotype:

IgG

Calculated MW: 38-43 kDa

Observed MW: 38-43 kDa

Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:1000-1:4000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate

Applications

Tested Applications:

WB, IP, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity: human, mouse

Cited Species:

human, mouse, rat, pig, chicken, zebrafish, sheep

Positive Controls:

WB: NIH/3T3 cells, Calyculin A treated HEK-293T cells

IP: Calyculin A treated PC-3 cells,

Background Information

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade plays also a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. 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. The antibody recognizes ERK2 phosphorylation sites Thr185 and Tyr187.

Notable Publications

Author	Pubmed ID	Journal	Application
Xin-Sen Chen	36182039	Pharmacol Res	WB
Liping Wang	34559939	IUBMB Life	WB
Yan Sun	34469122	ACS Chem Neurosci	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

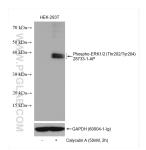
For technical support and original validation data for this product please contact:

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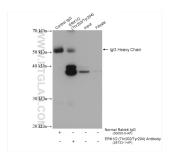
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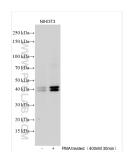
Selected Validation Data



Non-treated HEK-293T and Calyculin A treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 28733-1-AP (ERK1/2-phospho-Thr202/Tyr204) at dilution of 1:3000 incubated at 4°C overnight. The membrane was stripped and reblotted with GAPDH antibody as loading control.



IP result of anti-Phospho-ERK1/2 (Thr202/Tyr204) (IP:28733-1-AP, 2ug; Detection:28733-1-AP 1:1000) with Calyculin A treated PC-3 cells lysate 1552 ug.



Non-treated and PMA treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 28733-1-AP (Phospho-ERK1/2 (Thr202/Tyr204) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.