

For Research Use Only

# Phospho-ERK1/2 (Thr202/Tyr204) Recombinant antibody

Catalog Number: 80031-1-RR

36 Publications



## Basic Information

Catalog Number:

80031-1-RR

Size:

100ul, Concentration: 1000 ug/ml by  
Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM\_002746

GeneID (NCBI):

5595

UNIPROT ID:

P27361

Full Name:

mitogen-activated protein kinase 3

Calculated MW:

38-43 kDa

Observed MW:

38-40 kDa

Purification Method:

Protein A purification

CloneNo.:

8D12

Recommended Dilutions:

WB 1:2000-1:10000

## Applications

Tested Applications:

WB, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat

Positive Controls:

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

## Notable Publications

Author	Pubmed ID	Journal	Application
Baiqing He	34611079	Aging (Albany NY)	WB
Chao Wu	34809653	Chin Med	WB
Lu Zhang	36355777	Br J Pharmacol	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

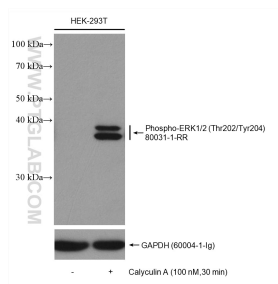
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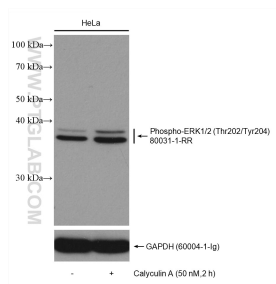
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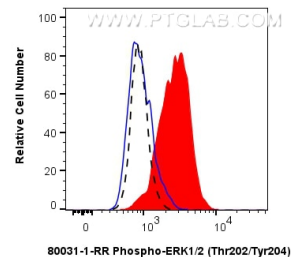
## Selected Validation Data



Non-treated HEK-293T and Calyculin A treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 80031-1-RR (Phospho-ERK1/2 (Thr202/Tyr204) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Non-treated HeLa and Calyculin A treated HeLa cells were subjected to SDS PAGE followed by western blot with 80031-1-RR (Phospho-ERK1/2 (Thr202/Tyr204) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



1X10<sup>6</sup> HepG2 cells untreated (dashed lines) or treated with Calyculin A which intracellularly stained with 0.06 ug Phospho-ERK1/2 (Thr202/Tyr204) Recombinant antibody (80031-1-RR, Clone:8D12) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.06 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.