For Research Use Only

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

Catalog Number:80031-1-PBS



**Basic Information** 

Catalog Number:

Size: 1mg/ml

80031-1-PBS

NM\_002746 GeneID (NCBI):

GenBank Accession Number:

Source: **UNIPROT ID:** Rabbit P27361 Isotype: Full Name:

mitogen-activated protein kinase 3

Calculated MW: 38-43 kDa Observed MW: 38-40 kDa

**Purification Method:** Protein A purification

CloneNo.: 8D12

**Applications** 

**Tested Applications:** 

WB, FC (Intra), Indirect ELISA

Species Specificity: human, mouse

## **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.

Storage

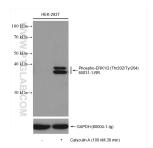
Storage:

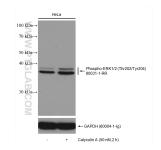
Store at -80°C.

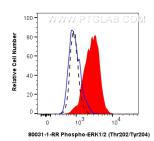
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

PBS Only

## 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. This data was developed using the same antibody clone with 80031-1-PBS in a different storage buffer formulation.

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. This data was developed using the same antibody clone with 80031-1-PBS in a different storage buffer formulation.

1X10^6 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. This data was developed

