

For Research Use Only

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

Catalog Number:80031-1-PBS



## Basic Information

<b>Catalog Number:</b> 80031-1-PBS	<b>GenBank Accession Number:</b> NM_002746	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5595	<b>CloneNo.:</b> 8D12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P27361	
<b>Isotype:</b> IgG	<b>Full Name:</b> mitogen-activated protein kinase 3	
	<b>Calculated MW:</b> 38-43 kDa	
	<b>Observed MW:</b> 38-40 kDa	

## 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

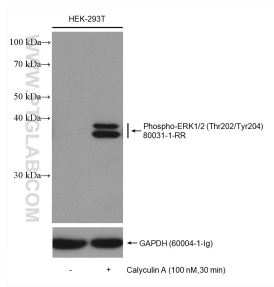
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

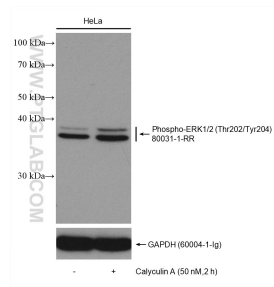
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
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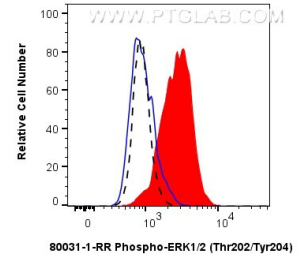
## Selected Validation Data



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. 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<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. This data was developed