

For Research Use Only

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



Catalog Number: 28733-1-AP **268 Publications**

## Basic Information

<b>Catalog Number:</b> 28733-1-AP	<b>GenBank Accession Number:</b> NM_002746	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 600 µg/ml	<b>GeneID (NCBI):</b> 5595	<b>Recommended Dilutions:</b> WB 1:1000-1:9000 IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate
<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> 38-43 kDa	

## Applications

<b>Tested Applications:</b> IP, WB, ELISA	<b>Positive Controls:</b> WB : Calyculin A treated PC-3 cells, Calyculin A treated HEK-293T cells IP : Calyculin A treated PC-3 cells,
<b>Cited Applications:</b> WB, IF, IHC	
<b>Species Specificity:</b> Human, mouse, rat	
<b>Cited Species:</b> human, chicken, rat, sheep, mouse, pig	

## 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

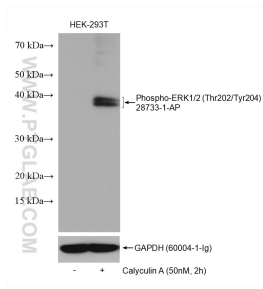
## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

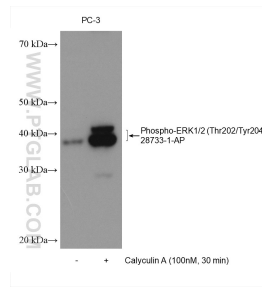
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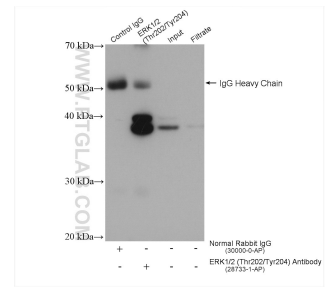
## Selected Validation Data



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 re-blotted with GAPDH antibody as loading control.



Non-treated and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 28733-1-AP (Phospho-ERK1/2 (Thr202/Tyr204) antibody) at dilution of 1:4500 incubated at 4°C overnight.



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.