For Research Use Only

## Phospho-p38 MAPK (Thr180/Tyr182) Polyclonal antibody



Catalog Number: 28796-1-AP

115 Publications

**Basic Information** 

Catalog Number: 28796-1-AP Size: 600 µg/ml Source: Rabbit

Isotype: IgG GenBank Accession Number:

BC031574

GeneID (NCBI):
1432

UNIPROT ID:
Q16539

mitogen-activated protein kinase 14

Calculated MW: 360 aa, 41 kDa Observed MW: 38-42 kDa

Full Name:

Applications

Tested Applications: IF/ICC, WB, ELISA Cited Applications: WB, IF, IHC Species Specificity: Human, mouse

Cited Species: human, rat, mouse, pig WB 1:1000-1:4000 IF 1:50-1:500

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

Positive Controls:

WB: UV treated HEK-293T cells, LPS treated THP-1

cells, UV treated NIH/3T3 cells

IF: LPS treated THP-1 cells,

## **Background Information**

A stress-activated serine/threonine protein kinase, p38 mitogen-activated protein kinase (p38 MAPK), belongs to the MAP kinase superfamily. Diverse extracellular stimuli, including ultraviolet light, irradiation, heat shock, high osmotic stress, proinflammatory cytokines and certain mitogens, trigger a stress-regulated protein kinase cascade culminating in activation of p38 MAPK through phosphorylation on a TGY motif within the kinase activation loop. The p38 MAPK undergoes dual phosphorylation at Thr182 and Tyr180 in the Thr-Gly-Tyr activation loop by MAP kinase kinase 6 (MKK6). Upon activation, p38 MAPK phosphorylates multiple substrates, including MAPK activated protein kinase 2 (MAPKAPK2) and activating transcription factor 2 (ATF-2). (PMID: 26901653, PMID: 10807318)

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Zemin Zhu	36175845	BMC Mol Cell Biol	WB
Xin-Sen Chen	36182039	Pharmacol Res	WB
Liping Wang	34559939	IUBMB Life	WB

Storage

Storage:

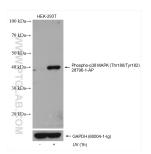
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

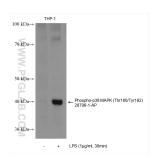
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

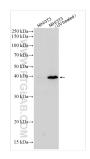
## **Selected Validation Data**



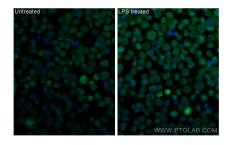
Non-treated and UV treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 28796-1-AP (Phospho-p38 MAPK (Thr180/Tyr182) antibody) at dilution of 1:2000 incubated at room temperature for 1 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



Non-treated and LPS treated THP-1 cells were subjected to SDS PAGE followed by western blot with 28796-1-AP (Phospho-p38 MAPK (Thr180/Tyr182) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 28796-1-AP (Phospho-p38 MAPK (Thr180/Tyr182) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed LPS treated THP-1 cells using Phospho-p38 MAPK (Thr180/Tyr182) antibody (28796-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).