For Research Use Only

Phospho-p38 MAPK (Thr180/Tyr182) Polyclonal antibody



Catalog Number: 28796-1-AP 211 Publications

Basic Information

Catalog Number:

28796-1-AP

100ul , Concentration: 600 ug/ml by

Nanodrop:

Source: Rabbit

Isotype:

IgG

GenBank Accession Number:

BC031574 GeneID (NCBI):

UNIPROT ID:

Q16539 Full Name:

mitogen-activated protein kinase 14

Observed MW:

Applications

Tested Applications: WB, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity: human, mouse **Cited Species:**

human, mouse, rat, pig

Calculated MW: 360 aa, 41 kDa

38-42 kDa

Positive Controls:

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

Purification Method:

WB 1:1000-1:4000 IF/ICC 1:50-1:500

Antigen affinity purification

Recommended Dilutions:

cells, UV treated NIH/3T3 cells

IF/ICC: LPS treated THP-1 cells, HepG2 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 $culminating in activation of p38 \, MAPK \, through \, phosphory lation \, on \, a \, TGY \, motif \, within \, the \, kinase \, activation \, loop.$ 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:

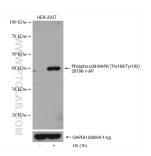
Store at -20°C. Stable for one year after shipment.

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

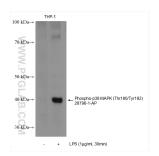
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

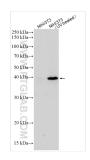
Selected Validation Data



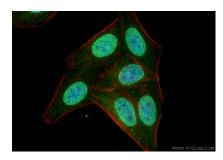
Non-treated and UV treated HEK-293T cells were subjected to SDS PAGE followed by western blot with 28796-1-AP (Phospho-p38 MAPK (Thr180/Tyr182) antibody) at dilution of 1:2000 incubated at room temperature for 1 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



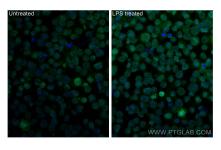
Non-treated and LPS treated THP-1 cells were subjected to SDS PAGE followed by western blot with 28796-1-AP (Phospho-p38 MAPK (Thr180/Tyr182) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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 HepG2 cells using Phospho-p38 MAPK (Thr180/Tyr182) antibody (28796-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



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 Affini Pure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed HepG2 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) (SA00013-2).