For Research Use Only

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

www.ptglab.com

Catalog Number:81212-2-RR

**Basic Information** 

GenBank Accession Number:

**Purification Method:** 

81212-2-RR

Catalog Number:

BC031574

Protein A purfication

GeneID (NCBI):

CloneNo.:

100ul, Concentration: 1000 ug/ml by 1432

242308D3

Nanodrop:

**UNIPROT ID:** Q16539

Recommended Dilutions: WB 1:2000-1:10000

Source: Rabbit

Full Name:

Isotype:

mitogen-activated protein kinase 14

IgG

Calculated MW: 360 aa, 41 kDa

> Observed MW: 38-42 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Species Specificity: human, mouse

**Positive Controls:** 

WB: Anisomycin treated HeLa cells, UV treated NIH/3T3 cells, Anisomycin treated NIH/3T3 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)

## Storage

Storage:

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

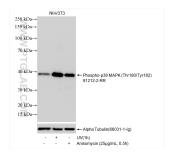
Storage Buffer:

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

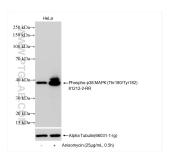
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

## **Selected Validation Data**



Non-treated NIH/3T3 cells, UV treated and Anisomycin treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 81212-2-RR (Phospho-p38 MAPK (Thr180/Tyr182) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Alpha Tubulin (66031-1-Ig) antibody as a loading control.



Non-treated HeLa cells and Anisomycin treated HeLa cells were subjected to SDS PAGE followed by western blot with 81212-2-RR (Phospho-p38 MAPK (Thr180/Tyr182) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Alpha Tubulin (66031-1-lg) antibody as a loading control.