

Product datasheet for AP02504PU-S

I-S

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OriGene Technologies, Inc.

p38 (MAPK14) pThr180 Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Western Blot: 1/1000.

Immunohistochemistry on Paraffin Sections: 1/50~1/100.

Reactivity: Human, Mouse

Host: Rabbit
Clonality: Polyclonal

Immunogen: The antiserum was produced against synthesized phosphopeptide derived from Human p38

MAPK around the phosphorylation site of Threonine 180 (E-M-Tp-G-Y).

Specificity: This antibody was affinity-purified from rabbit antiserum by Affinity-Chromatography using

epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site. This antibody detects endogenous levels of p38 MAPK only when phosphorylated at

Threonine 180.

Formulation: PBS (without Mg2+ and Ca2+), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol

State: Aff - Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Immunoaffinity Chromatography

Conjugation: Unconjugated

Storage: Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: One year from despatch.

Gene Name: mitogen-activated protein kinase 14

Database Link: Entrez Gene 1432 Human

Q16539





Background:

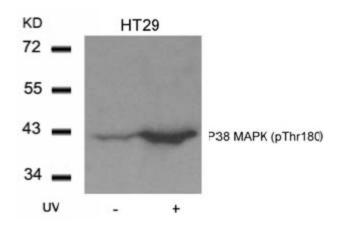
p38 is a 38 kDa Stress Activated Protein Kinase / Map Kinase (SAPK / MAPK) that is fully activated by dual phosphorylation on threonine 180 and tyrosine 182, within the activation loop. p38 MAPK plays a critical role in the initiation of G2 delay after ultraviolet radiation; gene knock out studies have also revealed a critical role for p38 in cardiac remodeling. Downstream targets of p38 include the transcription factors ELK1 and ATF2 and the kinases MAPKAPK2 and MAPKAPK5. p38 MAPK plays a role in the production of IL6 and is thought to stabilize erythropoietin production during hypoxic stress.

It is activated by environmental stress, many proinflammatory cytokines and lipopolysaccharide. Dual phosphorylation by MAP2K3 and MAP2K6 is required for activation of p38 MAPK. It interacts with MAX, Cdc25B, Cdc25C and binds to the kinase interaction domain in the protein tyrosine phosphatase PTPRR; this interaction retains p38 MAPK in the cytoplasm.

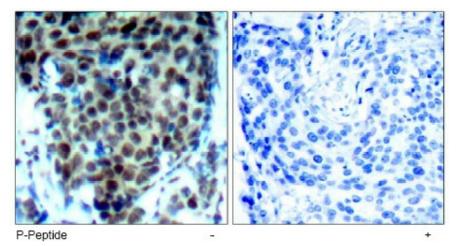
Synonyms:

Mitogen-activated protein kinase 14, p38 alpha, MXI2, SAPK2A, CSBP, CSBP1, CSBP2, CSPB1

Product images:



Western blot analysis of extracts from HT29 cells untreated or treated with UV for the indicated times using P38 MAPK antibody (Phospho-Tyr180)



Immunohistochemical analysis of paraffinembedded human breast carcinoma tissue using p38 MAPK antibody (Phospho-Thr180).