

RACO0578

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## Product Information

**Size:**

50ul

**Reactivity:**

Human, Rat

**Source:**

Homo sapiens (Human)

**Isotype:**

Rabbit IgG

**Applications:**

ELISA, WB, IHC, IF

**Recommended dilutions:**

WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200

**Protein Background:**

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK14 is one of the four p38 MAPKs which play an important role in the cascades of cellular responses evoked by extracellular stimuli such as proinflammatory cytokines or physical stress leading to direct activation of transcription factors. Accordingly, p38 MAPKs phosphorylate a broad range of proteins and it has been estimated that they may have approximately 200 to 300 substrates each. Some of the targets are downstream kinases which are activated through phosphorylation and further phosphorylate additional targets. RPS6KA5/MSK1 and RPS6KA4/MSK2 can directly phosphorylate and activate transcription factors such as CREB1, ATF1, the NF-kappa-B isoform RELA/NFKB3, STAT1 and STAT3, but can also phosphorylate histone H3 and the nucleosomal protein HMGN1.

**Gene ID:**

MAPK14

**Uniprot**

Q16539

**Synonyms:**

Mitogen-activated protein kinase 14 (MAP kinase 14) (MAPK 14) (EC 2.7.11.24) (Cytokine suppressive anti-inflammatory drug-binding protein) (CSAID-binding protein) (CSBP) (MAP kinase MXI2) (MAX-interacting protein 2) (Mitogen-activated protein kinase p38 alpha) (MAP kinase p38 alpha) (Stress-activated protein kinase 2a) (SAPK2a), MAPK14, CSBP CSBP1 CSBP2 CSPB1 MXI2 SAPK2A

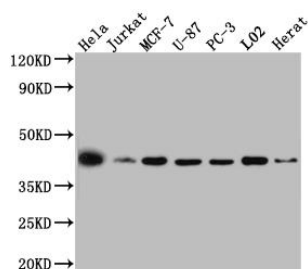
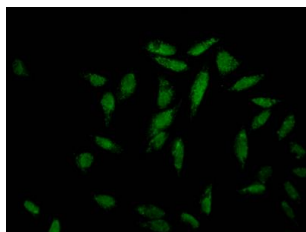
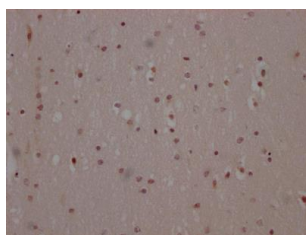
**Immunogen:**

A synthesized peptide derived from human p38 MAPK.

**Storage:**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

## Product Images



IHC image of RACO0578 diluted at 1:100 and staining in paraffin-embedded human brain tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Immunofluorescence staining of HeLa Cells with RACO0578 at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

### Western Blot

Positive WB detected in( HeLa whole cell lysate) Jurkat whole cell lysate) MCF-7 whole cell lysate) U-87 whole cell lysate) PC-3 whole cell lysate) L02 whole cell lysate) Rat Heart whole cell lysate) All lanes: p38 MAPK antibody at 1:1000

### Secondary

Goat polyclonal to rabbit IgG at 1:50000 dilution

Predicted band size: 42, 42, 35, 36, 30 kDa

Observed band size: 42 kDa