Phospho-MAPK14-Y182 pAb

**Catalog No.** AP0057  
**Category** Phosphorylated Antibodies

**Applications** WB, IHC, IF  
**Observed MW** 40kDa

**Cross-reactivity** Human, Mouse, Rat  
**Calculated MW** 29kDa/34kDa/35kDa/41kDa

**Immunogen Information**

**Immunogen** A synthetic phosphorylated peptide around Y182 of human MAPK14 (NP_620581.1).

**Gene ID** 1432  
**Swiss prot** Q16539  
**Synonyms** MAPK14; CSBP; CSBP1; CSBP2; CSPB1; EXIP; Mxi2; PRKM14; PRKM15; RK; SAPK2A; p38; p38ALPHA; mitogen-activated protein kinase 14

**Product Information**

**Source** Rabbit  
**Isotype** IgG

**Purification method** Affinity purification  
**Storage** Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.

**Background**

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is activated by various environmental stresses and proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

**Recommended Dilutions**

<table>
<thead>
<tr>
<th>Method</th>
<th>Dilution</th>
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<tbody>
<tr>
<td>WB</td>
<td>1:500 - 1:2000</td>
</tr>
<tr>
<td>IHC</td>
<td>1:50 - 1:200</td>
</tr>
<tr>
<td>IF</td>
<td>1:50 - 1:200</td>
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</tbody>
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Western blot analysis of extracts of NIH/3T3 cells, using Phospho-p38 MAPK-Y182 pAb (AP0057) at 1:1000 dilution. NIH/3T3 cells were treated by UV at room temperature for 15-30 minutes. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 3s.

Western blot analysis of extracts of 3T3L1 cells, using Phospho-MAPK14-Y182 pAb (AP0057) at 1:1000 dilution or p38 MAPK antibody (A10832). 3T3L1 cells treated with different concentrations of Irisin. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25ug per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 30s.
Immunohistochemistry of paraffin-embedded rat testis using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded rat ovary using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded rat spleen using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human lung using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human colon using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human colon carcinoma using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human appendix using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human breast cancer using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human placenta using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).
Immunohistochemistry of paraffin-embedded human stomach using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded human gastric cancer using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).

Immunohistochemistry of paraffin-embedded mouse testis using Phospho-MAPK14-Y182 antibody (AP0057) at dilution of 1:100 (40x lens).