MAPK1

Rabbit Anti-Mouse Mitogen-Activated Protein Kinase 1 Clone Poly6224 pAb

Catalog No.	CSI14410 CSI14411	**Quantity:**	50 µl 200 µl

Alternate Names: Stress activated kinase p38, p38 MAP kinase, stress activated protein kinase 2A, RK, ERK2, ERT1, MAPK2, P42MAPK, PRKM1, PRKM2, p38, p40, p41, p41mapk, extracellular signal-regulated kinase 2, extracellular signal-regulated kinase-2, mitogen-activated protein kinase 2, protein tyrosine kinase ERK2

Description: p38 mitogen-activated protein kinase (MAPK) is a member of the stress activated kinase family with a molecular weight of 38 kD. MAPK can be activated by a number of stimuli including heat, changes in osmolarity, irradiation, and cold. The MAPKs require dual phosphorylation (threonine and tyrosine) for enzymatic activation. The p38 MAP kinase is required for G2 cell cycle delay after UV irradiation, also participates in cytokine production (IL-6 and erythropoietin). The Poly6224 antibody recognizes human, mouse, and rat p38 MAPK and has been shown to be useful for Western blotting.

Structure: Belongs to serine/threonine kinase family, MAP subfamily, 38 kD.

Gene ID: 5594

Distribution: Ubiquitously expressed, nuclear and cytoplasmic

Function: 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.

Host: Rabbit

Immunogen: Peptide-KLH, C terminal

Isotype: IgG

Clone: Poly6224

Regulation: Activated by environmental stress, many pro-inflammatory cytokines and lipopolysaccharide. Dual phosphorylation by MAP2K3 and MAP2K6 is required for activation of p38 MAPK.

Formulation: This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide, 0.2% BSA (US Origin) and 50% glycerol. **Precaution:** Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.

Purification: The antibody was purified by antigen-affinity chromatography.

Modification: Phosphorylation

Reactivity: Mouse, Rat, Human

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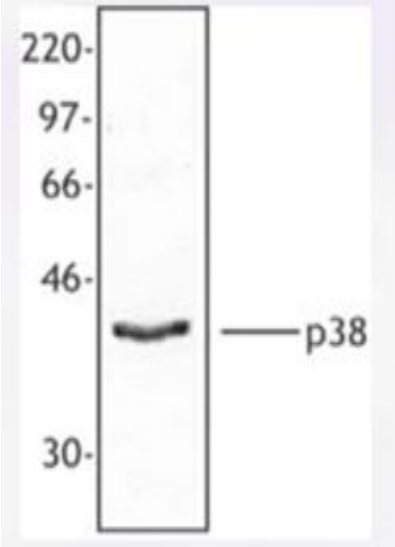
Applications: WB - Quality tested
IHC - Validated

Recommended Usage: Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10 µl per 5 ml antibody dilution buffer for each mini-gel. For IHC, use a 1:100 dilution of antibody for staining. Antigen retrieval for IHC of formalin-fixed paraffin-embedded tissue using 0.01 M sodium citrate buffer is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

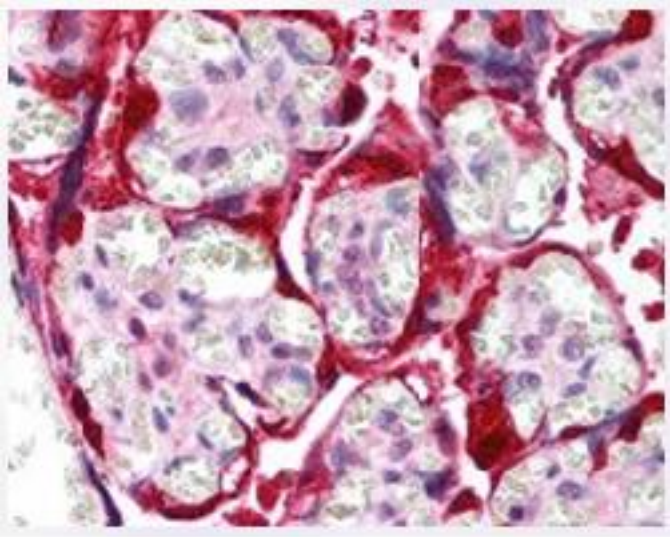
Storage & Stability: Upon receipt, store at -20° C.

Interaction: Interacts with MAX, Cdc25B, Cdc25C. Binds to kinase interaction domain in the protein tyrosine phosphatase PTPRR; this interaction retains p38 MAPK in the cytoplasm.

Hela cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with rabbit anti-p38 MAPK antibody. Proteins were visualized using a donkey anti-rabbit secondary conjugated to HRP and a chemiluminescence detection system.



Formalin-fixed paraffin-embedded human placenta tissue was stained with Poly6224 and developed with an alkaline phosphatase chromogen substate (red color). Tissue was counterstained with H&E (blue/pink). Magnification, 40X.



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