

U-Blot® Phospho-p38 MAPK (Thr180/Tyr182) Mouse mAb (WT9084)

User Manual

General Information

Product name	U-Blot® Phospho-p38 MAPK (Thr180/Tyr182) Mouse mAb
Product No.	WT9084
Clonality	Recombinant monoclonal
Clone Number	W-R56
Alternative name	MAPK14, CSBP, CSBP1, CSBP2, CSBP1, MXI2, SAPK2A

Key Features

Target	Phospho-p38 MAPK (Thr180/Tyr182)
Reactivity	Human
Applications	WB
MW(Calculated)	43 kDa
MW(Observed)	43 kDa
Host Species	Mouse
Isotype	IgG1/Kappa
Conjugate	Unconjugated
Modification	Phosphorylation
Modification Site	Thr180/Tyr182
Purification	Protein A affinity purification
Immunogen	Polypeptide
Specificity	Specific for p38 MAPK only when phosphorylated at Thr180/Tyr182

Storage Information

Storage	Store at -20°C. Avoid repeated freeze-thaw cycles
Stability	Stable for 12 months from date of receipt / reconstitution.
Formulation	PBS, Glycerol, BSA

Product Usage Information

Applications	Dilution	Recommended Species
WB	1:1000	Human

Target Information

Gene name MAPK14

Protein name p38 Mitogen-Activated Protein Kinase

Organism Human

Gene ID 1432

SwissProt Q16539

p38 MAP kinase (MAPK), also called RK or CSBP, is the mammalian orthologue of the yeast HOG kinase that participates in a signaling cascade controlling cellular responses to cytokines and stress. Four isoforms of p38 MAPK, p38 α , β , γ (also known as Erk6 or SAPK3), and δ (also known as SAPK4) have been identified.

Similar to the SAPK/JNK pathway, p38 MAPK is activated by a variety of cellular stresses, including osmotic shock, inflammatory cytokines, lipopolysaccharide (LPS), UV light, and growth factors.

Background

MKK3, MKK6, and SEK activate p38 MAPK by phosphorylation at Thr180 and Tyr182. Activated p38 MAPK has been shown to phosphorylate and activate MAPKAP kinase 2 and to phosphorylate the transcription factors ATF-2, Max, and MEF2. SB203580 is a selective inhibitor of p38 MAPK. This compound inhibits the activation of MAPKAPK-2 by p38 MAPK and subsequent phosphorylation of HSP27. SB203580 inhibits p38 MAPK catalytic activity by binding to the ATP-binding pocket, but does not inhibit phosphorylation of p38 MAPK by upstream kinases.

Cellular Localization Cytoplasm, Nucleus

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