

## Product datasheet for **TA389178**

### Phospho-MAPK14 (pThr180/Tyr182) Mouse Antibody [Clone ID: M139]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	M139
Applications:	ICC, WB
Recommended Dilution:	<b>WB:</b> 1:1000 <b>ICC:</b> 1:250
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M139 was generated from a phospho-p38 $\alpha$ (Thr-180/Tyr-182) synthetic peptide (coupled to KLH) corresponding to amino acid residues around threonine 180 and tyrosine 182 of rat p38 $\alpha$ . This peptide sequence is highly conserved in the p38 $\beta$ , $\gamma$ , and $\delta$ MAPKs, and is identical in human and mouse p38 $\alpha$ .
Specificity:	This antibody detects a 38 kDa* protein corresponding to the apparent molecular mass of p38 $\alpha$ on SDS-PAGE immunoblots of pervanadate treated human Jurkat and A431 cells, as well as anisomycin treated human HeLa cells.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN <sub>3</sub> and 50% glycerol
Concentration:	lot specific
Purification:	Protein A Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	38
Database Link:	<a href="#">Q16539</a>



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**Background:**

p38 MAP kinase (MAPK), also called RK, CSBP, and SAPK2a, is the mammalian orthologue of the yeast HOG kinase. This family of kinases participates in signaling cascades that control cellular responses to cytokines and stress. Four isoforms of p38 MAPK ( $\alpha, \beta, \gamma, \delta$ ) have been identified. Similar to the SAPK/JNK pathway, p38 MAPK is activated by a variety of cellular stresses including osmotic shock, inflammatory cytokines, lipopolysaccharides, UV light, and growth factors. MKK3 and SEK activate p38 MAPK by dual phosphorylation at Thr-180/Tyr-182. Activated p38 MAPK has been shown to phosphorylate and activate MAPKAP kinase 2 and to phosphorylate the transcription factors ATF-2, Max, and MEF2. T cells possess an alternative pathway for p38 activation where stimulation of the antigen receptor (TCR) induces phosphorylation of p38 on Tyr-323. This site is required for TCR-mediated phosphorylation of Thr-180 and catalytic activity. Thus, Tyr-323 may also have important roles in regulating p38 MAP kinase pathways.

**Note:**

Protein G purified tissue culture supernatant.