

Anti-p38 α MAP Kinase (Tyr-323), Phosphospecific Antibody

Catalog # AN1879

Product Information

Application	WB, ICC
Primary Accession	P47811
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	41287

Additional Information

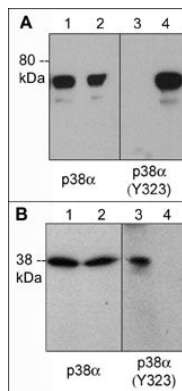
Gene ID	26416
Other Names	MAPK, p38, p38alpha, p38MAPK
Dilution	WB~~1:1000 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-p38 α MAP Kinase (Tyr-323), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

Background

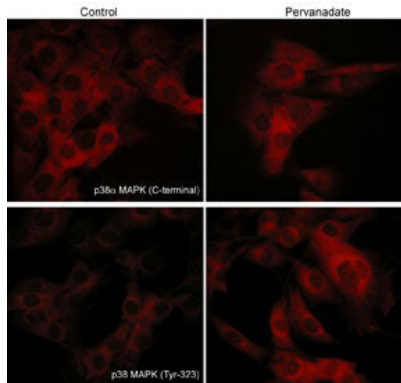
p38 MAP kinase (MAPK), also called RK, CSBP, and SAPK2a, is the mammalian orthologue of the yeast HOG kinase. This family of kinases participates in signaling cascades that control cellular responses to cytokines and stress. Four isoforms of p38 MAPK ($\alpha, \beta, \gamma, \delta$) have been identified. 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.

Images

A) Western blot image of GST-recombinant p38 (K53M) mutant kinase untreated (lanes 1 & 3) or treated with Fyn kinase (lanes 2 & 4). B) Western blot analysis of p38



phosphorylation in mouse macrophages stimulated with 1 mM pervanadate for 30 min. (lanes 1 & 3) then the blot was treated with alkaline phosphatase (lanes 2 & 4). Both blots were probed with anti-p38α (a.a. 319-328) (lanes 1 & 2) or anti-p38α (Tyr-323) (lanes 3 & 4).



Immunocytochemical labeling of p38 MAPK in pervanadate-treated mouse C2C12. The cells were labeled with mouse monoclonal p38α MAPK and rabbit polyclonal p38 MAPK (Tyr-323) antibodies, then the antibodies were detected using appropriate secondary antibodies conjugated to Cy3.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.