

# Anti-p38α MAP Kinase (C-terminal) Antibody

Catalog # AN1877

## **Specification**

## Anti-p38α MAP Kinase (C-terminal) Antibody - Product Information

Application WB
Primary Accession Q16539
Reactivity Bovine
Host Mouse

Clonality Mouse Monoclonal

Isotype IgG1
Calculated MW 41293

### Anti-p38α MAP Kinase (C-terminal) Antibody - Additional Information

Gene ID 1432

**Other Names** 

MAPK, p38, p38alpha, p38MAPK

**Dilution** 

WB~~1:1000

## 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 $\alpha$  MAP Kinase (C-terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Shipping**

Blue Ice

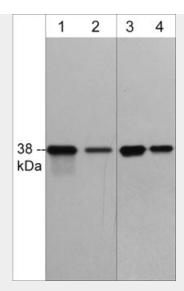
## Anti-p38α MAP Kinase (C-terminal) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

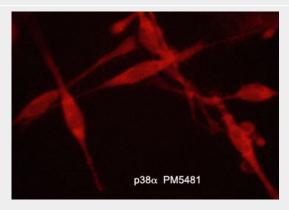
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-p38a MAP Kinase (C-terminal) Antibody - Images





Western blot analysis of human A431 cells (lanes 1 & 2) and rat A7r5 cells (lanes 3 & 4). The blot was probed with mouse monoclonal anti-p38 $\alpha$  (C-terminal) clone M548 at a dilution of 1:250 (lanes 1 & 3) or 1:1000 (lanes 2 & 4).



Immunocytochemical labeling of p38 $\alpha$  in aldehyde fixed and NP-40 permeabilized human NCI-H446 lung carcinoma cells. The cells were labeled with mouse monoclonal anti-p38 $\alpha$  (PM5481). The antibody was detected using goat anti-mouse DyLight® 594.

## Anti-p38α MAP Kinase (C-terminal) Antibody - 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.