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# p38 (ANT0036R) Rabbit mAb

CatalogNo: ANT8276 Recombinant R

Formulation: PBS,50%glycerol,0.05%Proclin 300,0.05%BSA

Quantity: 100 ug/vial

Host Species Reactivity Applications

Rabbit
 Human, Mouse, Rat,
 WB, IF, IP, ELISA

MW Isotype

• 41kD (Calculated) • IgG,Kappa

41kD (Observed)

#### **Recommended Dilution Ratios**

WB 1:1000-1:5000 IF 1:200-1:1000

ELISA 1:5000-1:20000

IP 1:50-1:200

### Storage

Storage\* -15°C to -25°C/1 year(Do not lower than -25°C)

#### **Basic Information**

**Clonality** Monoclonal

Clone Number ANT0036R

# Immunogen Information

**Specificity** Endogenous

## Target Information

p38

Organ	nism	Gene ID	UniProt ID
	Human	<u>1432</u> ;	<u>Q16539</u> ;
	Mouse	<u>26416</u> ;	<u>P47811</u> ;
	Rat		<u>P70618</u> ;

Cellular Localization

Cytoplasm, Nucleus

**Tissue specificity** Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung,

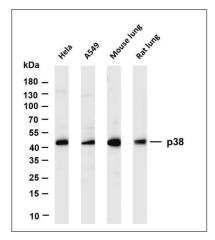
liver and kidney.

**Function** 

Catalytic activity:ATP + a protein = ADP + a

phosphoprotein.,cofactor:Magnesium.,Domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases., enzyme regulation: Activated by threonine and tyrosine phosphorylation by either of two dual specificity kinases, MAP2K3 or MAP2K6, and potentially also MAP2K4. Inhibited by dual specificity phosphatases, such as DUSP1. Specifically inhibited by the binding of pyridinylimidazole compounds, which are cytokinesuppressive anti-inflammatory drugs (CSAID). Isoform Mxi2 is 100-fold less sensitive to these agents than the other isoforms and is not inhibited by DUSP1. Isoform Exip is not activated by MAP2K6., Function: Responds to activation by environmental stress, pro-inflammatory cytokines and lipopolysaccharide (LPS) by phosphorylating a number of transcription factors, such as ELK1 and ATF2 and several downstream kinases, such as MAPKAPK2 and MAPKAPK5. Plays a critical role in the production of some cytokines, for example IL-6. May play a role in stabilization of EPO mRNA during hypoxic stress. Isoform Mxi2 activation is stimulated by mitogens and oxidative stress and only poorly phosphorylates ELK1 and ATF2. Isoform Exip may play a role in the early onset of apoptosis., online information: P38 mitogenactivated protein kinases entry, ANTM: Dually phosphorylated on Thr-180 and Tyr-182, which activates the enzyme., PTM: Phosphorylated upon DNA damage, probably by ATM or

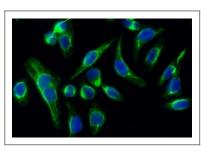
ATR.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Binds to a kinase interaction motif within the protein tyrosine phosphatase, PTPRR. This interaction retains MAPK14 in the cytoplasm and prevents nuclear accumulation. Interacts with SPAG9 (By similarity). Interacts with NP60 and FAM48A.,tissue specificity:Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung, liver and kidney.,



#### **Validation Data**

Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-p38 (ANT0036R) antibody. The HRPconjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: A549 Lane 3: Mouse lung Lane 4: Rat lung

Predicted band size: 41kDa Observed band size: 41kDa



Immunofluorescence analysis of Hela cell. 1,p38 Antibody(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). 3 DAPI(blue) 10min.

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