

**p38 (phospho Thr180/Y182) Polyclonal Antibody**

<b>Catalog No :</b>	YP0338
<b>Reactivity :</b>	Human;Mouse;Rat;Guineapig
<b>Applications :</b>	IF;WB;FCM;IHC;ELISA
<b>Target :</b>	p38
<b>Fields :</b>	>>Endocrine resistance;>>MAPK signaling pathway;>>Rap1 signaling pathway;>>FoxO signaling pathway;>>Sphingolipid signaling pathway;>>Oocyte meiosis;>>Cellular senescence;>>Adrenergic signaling in cardiomyocytes;>>VEGF signaling pathway;>>Osteoclast differentiation;>>Signaling pathways regulating pluripotency of stem cells;>>Platelet activation;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>NOD-like receptor signaling pathway;>>RIG-I-like receptor signaling pathway;>>C-type lectin receptor signaling pathway;>>IL-17 signaling pathway;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>T cell receptor signaling pathway;>>Fc epsilon RI signaling pathway;>>TNF signaling pathway;>>Leukocyte transendothelial migration;>>Thermogenesis;>>Neurotrophin signaling pathway;>>Retrograde endocannabinoid signaling;>>Dopaminergic synapse;>>Inflammatory mediator regulation of TRP channels;>>GnRH signaling pathway;>>Progesterone-mediated oocyte maturation;>
<b>Gene Name :</b>	MAPK14
<b>Protein Name :</b>	Mitogen-activated protein kinase 14
<b>Human Gene Id :</b>	1432
<b>Human Swiss Prot No :</b>	Q16539
<b>Mouse Gene Id :</b>	26416
<b>Mouse Swiss Prot No :</b>	P47811
<b>Rat Swiss Prot No :</b>	P70618
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human p38 MAPK around the phosphorylation site of Thr179 and Tyr181. AA

range:151-200

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**Specificity :** Phospho-p38 (T180/Y182) Polyclonal Antibody detects endogenous levels of p38 protein only when phosphorylated at T180/Y182.

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**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

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**Source :** Polyclonal, Rabbit,IgG

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**Dilution :** IF ICC 1:100-500;WB 1:500-2000;Flow Cyt 1:50-200;IHC 1:100-500;ELISA 1:5000-20000

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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

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**Observed Band :** 38kD

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**Cell Pathway :** T\_Cell\_Receptor; Regulates Angiogenesis; Cell Growth; Toll\_Like; MAPK\_ERK\_Growth;MAPK\_G\_Protein; B\_Cell\_Antigen

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**Background :** The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular processes such as proliferation, differentiation, transcription regulation and development. This kinase is activated by various environmental stresses and proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding d

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**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 pyridinyl-imidazole compounds, which are cytokine-suppressive anti-inflammatory drugs (CSAID). Isoform Mxi2 is 100-fold less sensitive to these agents than the other isoforms and is not inhibited by

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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 seve

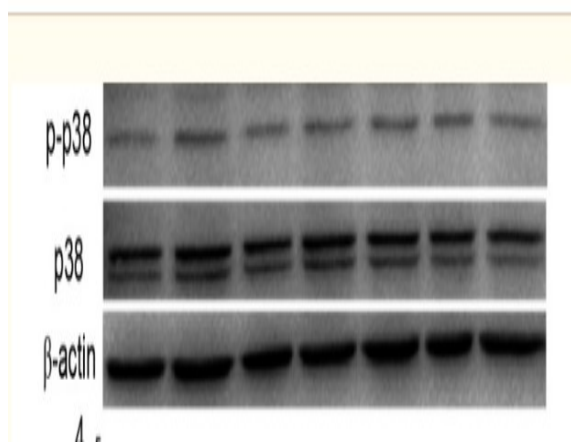
**Subcellular Location :**

Cytoplasm . Nucleus .

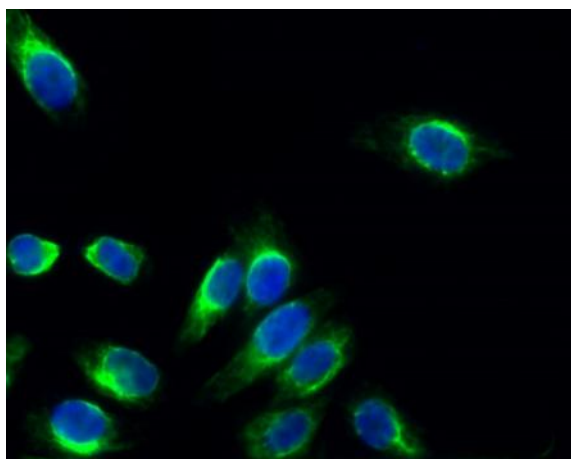
**Expression :**

Brain, heart, placenta, pancreas and skeletal muscle. Expressed to a lesser extent in lung, liver and kidney.

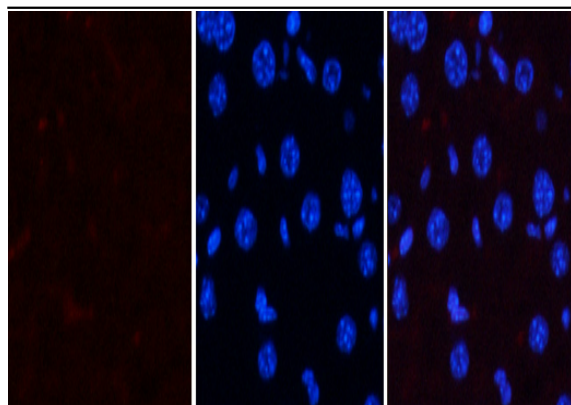
## Products Images



Xu, Yini, et al. "Inhibitory effects of oxymatrine on TGF- $\beta$ 1-induced proliferation and abnormal differentiation in rat cardiac fibroblasts via the p38MAPK and ERK1/2 signaling pathways." *Molecular medicine reports* 16.4 (2017): 5354-5362.



Immunofluorescence analysis of HeLa cell. 1, p38 (phospho Thr180/Y182) Polyclonal 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.

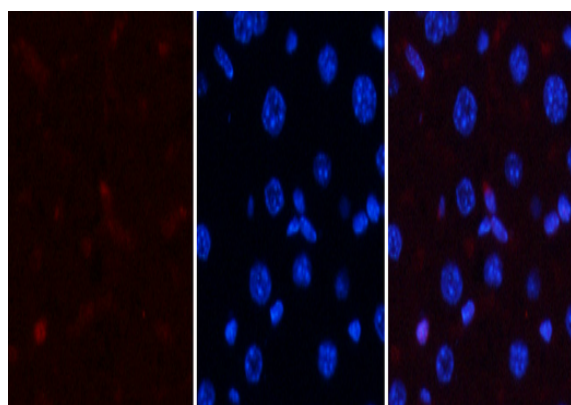


A

B

C

Immunofluorescence analysis of mouse-liver tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

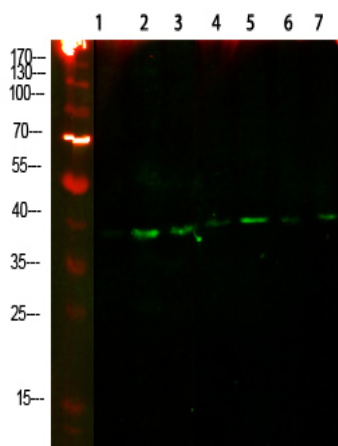


A

B

C

Immunofluorescence analysis of mouse-liver tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody (red) was diluted at 1:200 (4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

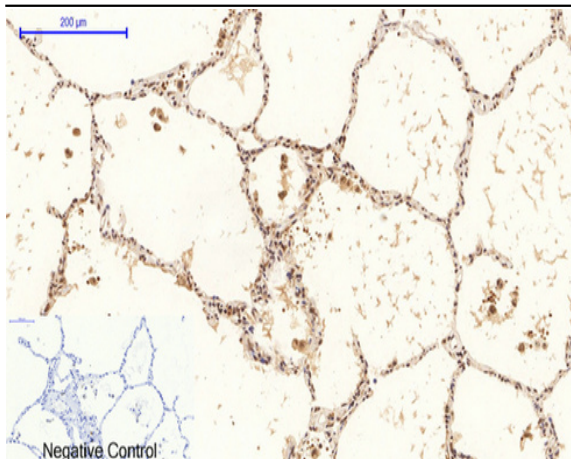


- 1 mouse-lung
- 2 mouse-liver
- 3 RAT-kidney
- 4 HEPG2
- 5 HEPG2-UV
- 6 3T3-UV
- 7 3T3

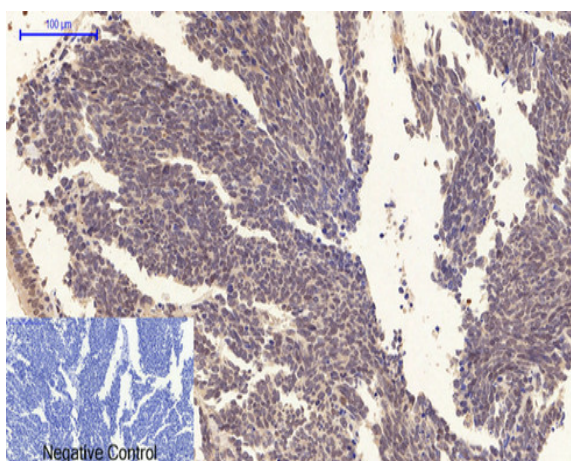
P38

p-T180Y182

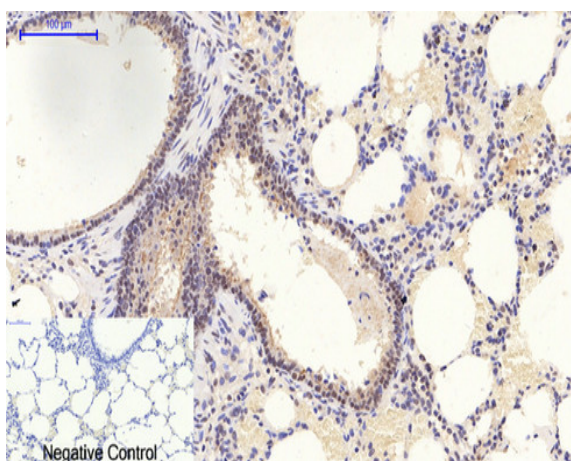
Western Blot analysis of various cells using primary antibody diluted at 1:1000 (4°C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour)



Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

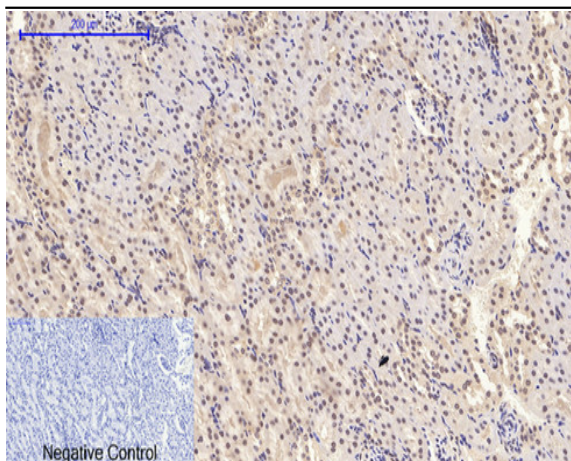


Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

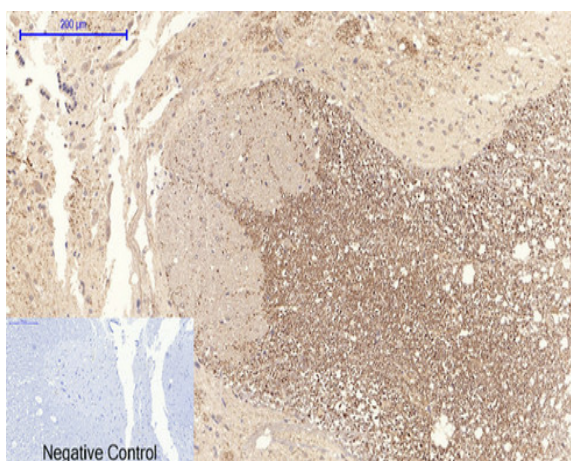


Immunohistochemical analysis of paraffin-embedded Rat-lung tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

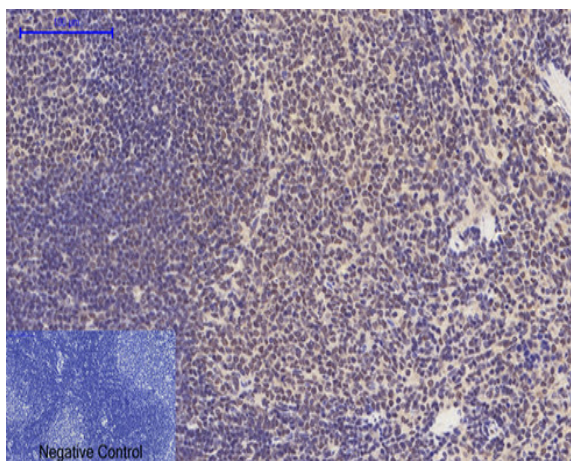




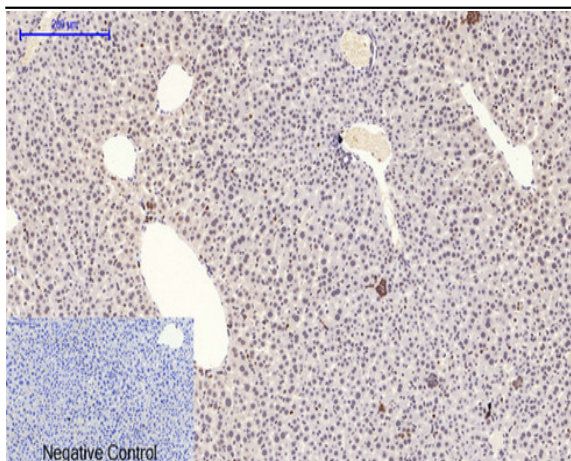
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



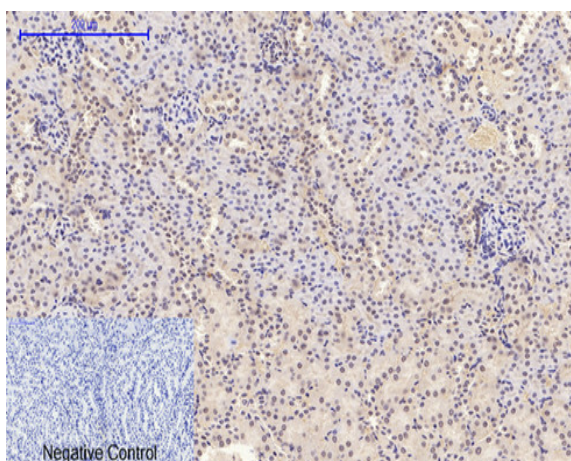
Immunohistochemical analysis of paraffin-embedded Rat-spinal-cord tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



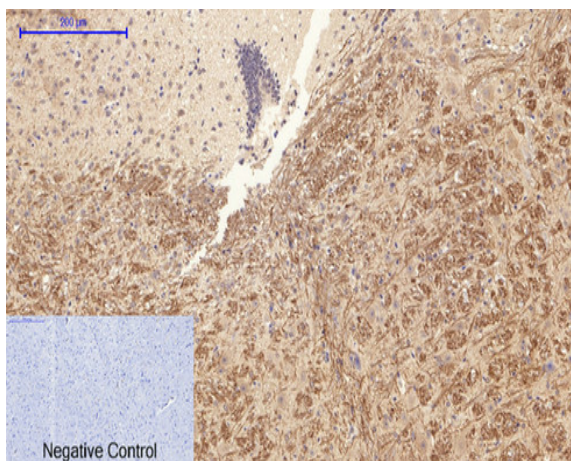
Immunohistochemical analysis of paraffin-embedded Rat-spleen tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-liver tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.

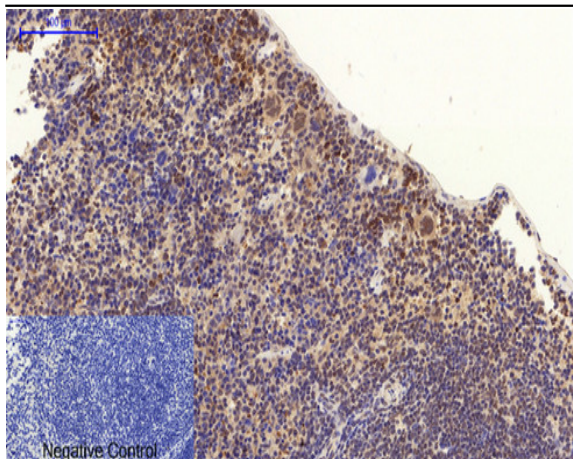


Immunohistochemical analysis of paraffin-embedded Mouse-kidney tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.

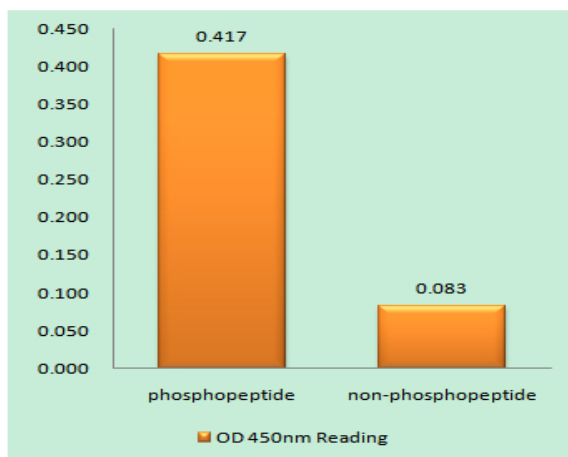


Immunohistochemical analysis of paraffin-embedded Mouse-brain tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.





Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue. 1, p38 (phospho Thr180/Y182) Polyclonal Antibody was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using p38 MAPK (Phospho-Thr179+Tyr181) Antibody