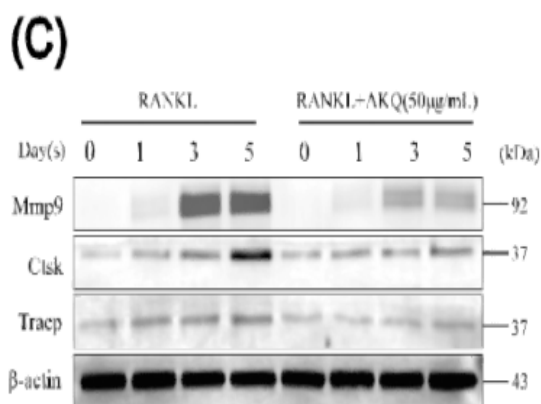


Actin β Polyclonal Antibody

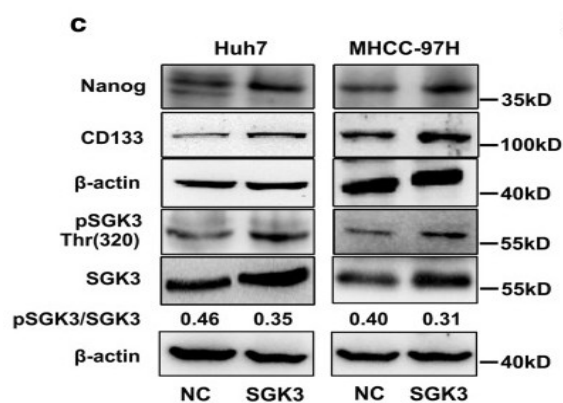
Catalog No :	YT0099
Reactivity :	Human;Mouse;Rat;Chicken;Globefish;Bovine;Hamster;Pig;Ovine;Cat;Pig;Dog;Sheep
Applications :	IF;WB;IHC;ELISA
Target :	Actin β
Fields :	>>Rap1 signaling pathway;>>Phagosome;>>Apoptosis;>>Hippo signaling pathway;>>Focal adhesion;>>Adherens junction;>>Tight junction;>>Platelet activation;>>Neutrophil extracellular trap formation;>>Leukocyte transendothelial migration;>>Thermogenesis;>>Regulation of actin cytoskeleton;>>Thyroid hormone signaling pathway;>>Oxytocin signaling pathway;>>Gastric acid secretion;>>Amyotrophic lateral sclerosis;>>Bacterial invasion of epithelial cells;>>Vibrio cholerae infection;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Salmonella infection;>>Yersinia infection;>>Influenza A;>>Proteoglycans in cancer;>>Hepatocellular carcinoma;>>Hypertrophic cardiomyopathy;>>Arrhythmogenic right ventricular cardiomyopathy;>>Dilated cardiomyopathy;>>Viral myocarditis;>>Fluid shear stress and atherosclerosis
Gene Name :	ACTB
Protein Name :	Actin cytoplasmic 1
Human Gene Id :	60
Human Swiss Prot No :	P60709
Mouse Gene Id :	11461
Mouse Swiss Prot No :	P60710
Rat Gene Id :	81822
Rat Swiss Prot No :	P60711
Immunogen :	Synthesized peptide derived from the N-terminal region of human Actin β . AA range: 1-80

Specificity :	<u>Actin β Polyclonal Antibody detects endogenous levels of Actin β protein.</u>
Formulation :	<u>Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.</u>
Source :	<u>Polyclonal, Rabbit,IgG</u>
Dilution :	<u>IF 1:50-200 WB 1:2000 - 1:10000. IHC 1:100 - 1:300. ELISA: 1:20000. Not yet tested in other applications.</u>
Purification :	<u>The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.</u>
Concentration :	<u>1 mg/ml</u>
Storage Stability :	<u>-15°C to -25°C/1 year(Do not lower than -25°C)</u>
Observed Band :	<u>42kD</u>
Cell Pathway :	<u>Focal adhesion;Adherens_Junction;Adherens_Junction;Leukocyte transendothelial migration;Regulates Actin and Cytoskeleton;Vibrio cholerae infection;Pathogenic Escherichia coli infection;Hypertrophic ca</u>
Background :	<u>This gene encodes one of six different actin proteins. Actins are highly conserved proteins that are involved in cell motility, structure, and integrity. This actin is a major constituent of the contractile apparatus and one of the two nonmuscle cytoskeletal actins. [provided by RefSeq, Jul 2008],</u>
Function :	<u>disease:Defects in ACTB are a cause of dystonia juvenile-onset (DYTJ) [MIM:607371]. DYTJ is a form of dystonia with juvenile onset. Dystonia is defined by the presence of sustained involuntary muscle contraction, often leading to abnormal postures. DYTJ patients manifest progressive, generalized, dopa-unresponsive dystonia, developmental malformations and sensory hearing loss.,function:Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.,miscellaneous:In vertebrates 3 main groups of actin isoforms, alpha, beta and gamma have been identified. The alpha actins are found in muscle tissues and are a major constituent of the contractile apparatus. The beta and gamma actins coexist in most cell types as components of the cytoskeleton and as mediators of internal cell motility.,similarity:Belongs to the</u>
Subcellular Location :	<u>Cytoplasm, cytoskeleton . Nucleus . Localized in cytoplasmic mRNP granules containing untranslated mRNAs. .</u>
Expression :	<u>B-cell lymphoma,Brain,Cajal-Retzius cell,Eye,Fetal brain cortex,Foreskin,Hepatocellular car</u>

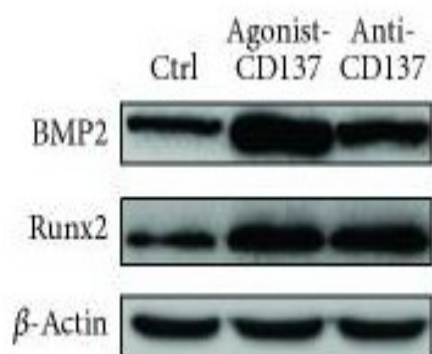
Products Images



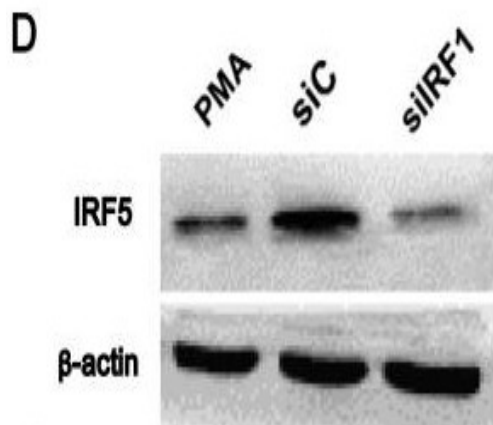
Aikeqing, a kidney- and spleen-tonifying compound Chinese medicine granule, prevented ovariectomy-induced bone loss in rats via the suppression of osteoclastogenesis. *BIOMEDICINE & PHARMACOTHERAPY* Xiao-Ling Shen *WB Rat* Mouse left femurs bone marrow macrophages (BMMs)



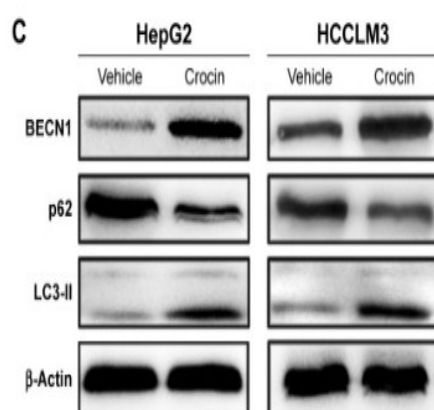
Liu, Fengchao, et al. "Prolonged inhibition of class I PI3K promotes liver cancer stem cell expansion by augmenting SGK3/GSK-3 β / β -catenin signalling." *Journal of Experimental & Clinical Cancer Research* 37.1 (2018): 122.



Chen, Rui, et al. "Activation of CD137 Signaling Enhances Vascular Calcification through c-Jun N-Terminal Kinase-Dependent Disruption of Autophagic Flux." *Mediators of inflammation* 2018 (2018).



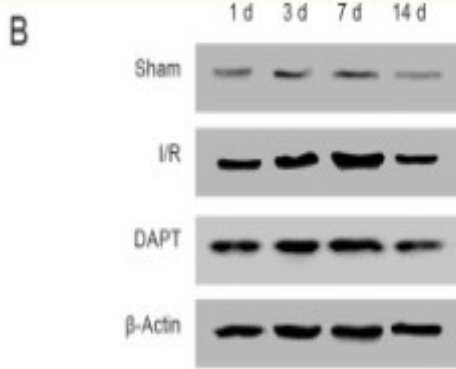
Xie, Changli, et al. "Effects of IRF1 and IFN- β interaction on the M1 polarization of macrophages and its antitumor function." *International journal of molecular medicine* 38.1 (2016): 148-160.



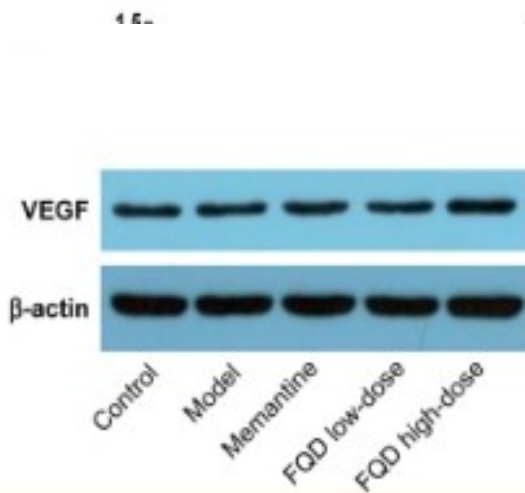
Yao, Chong, et al. "Crocin induces autophagic apoptosis in hepatocellular carcinoma by inhibiting Akt/mTOR activity." *OncoTargets and therapy* 11 (2018): 2017.



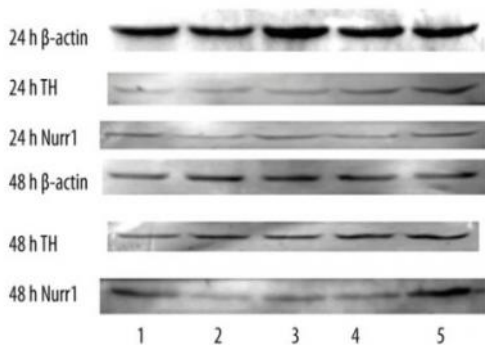
Li, Haiming, et al. "Collagen External Scaffolds Mitigate Intimal Hyperplasia and Improve Remodeling of Vein Grafts in a Rabbit Arteriovenous Graft Model." *BioMed Research International* 2017 (2017).



Wang, Jun-Jie, et al. "Neuroprotective effect of Notch pathway inhibitor DAPT against focal cerebral ischemia/reperfusion 3 hours before model establishment." *Neural regeneration research* 14.3 (2019): 452.

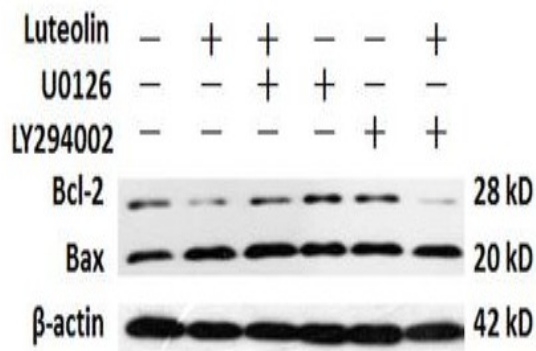


Wang, Feixue, et al. "The Chinese herbal formula Fuzheng Quxie Decoction attenuates cognitive impairment and protects cerebrovascular function in SAMP8 mice." *Neuropsychiatric disease and treatment* 14 (2018): 3037.

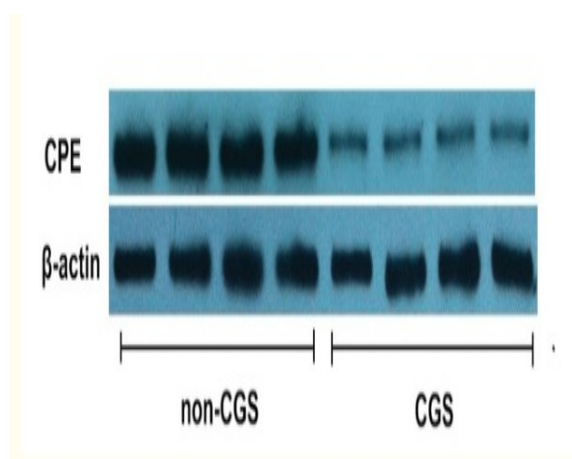


Note: 1 – negative control; 2 – solvent control; 3 – 50 μmol/L; 4 – 300 μmol/L; 5 – 600 μmol/L

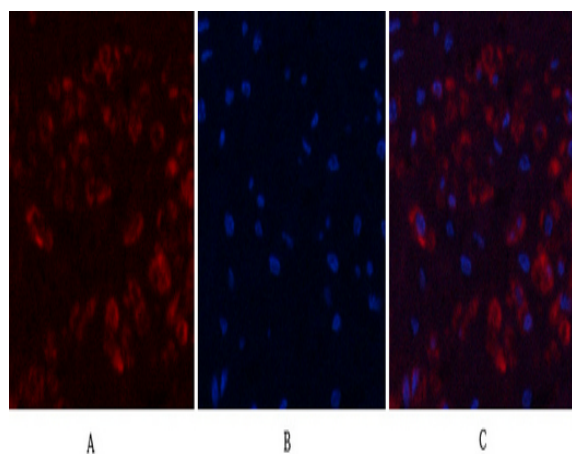
Yu, Jia, et al. "Effects of simazine exposure on neuronal development-related factors in mn9d cells." *Medical science monitor: international medical journal of experimental and clinical research* 22 (2016): 2831.



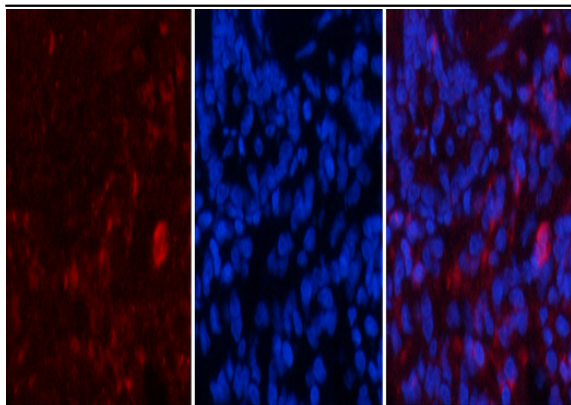
Lu, Xueying, et al. "Luteolin induces apoptosis in vitro through suppressing the MAPK and PI3K signaling pathways in gastric cancer." *Oncology letters* 14.2 (2017): 1993-2000.



Dai, Shu-Long, et al. "The expression of hepatic carboxypeptidase E is decreased in patients with cholesterol gallstone." *Saudi journal of gastroenterology: official journal of the Saudi Gastroenterology Association* 21.4 (2015): 226.

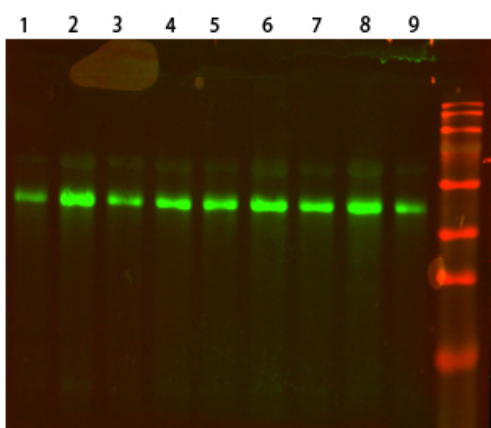


Immunofluorescence analysis of human-uterus tissue. 1, Actin β Polyclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50min). 3, Picture B: DAPI (blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B

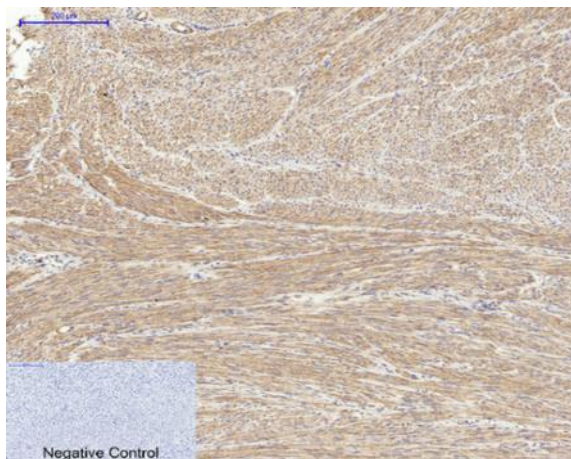


A B C

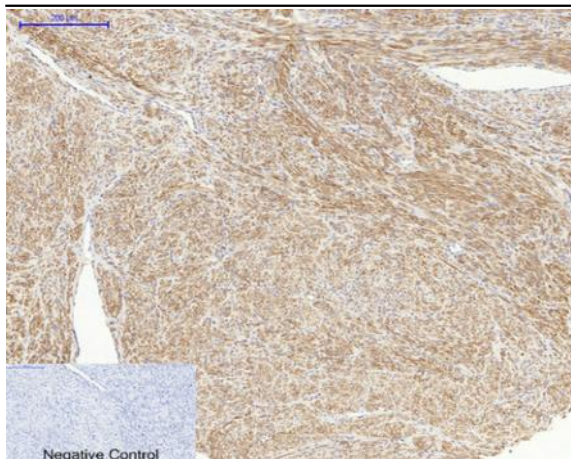
Immunofluorescence analysis of rat-lung tissue. 1, Actin β Polyclonal Antibody (red) was diluted at 1:200 (4 °C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300 (room temperature, 50 min). 3, Picture B: DAPI (blue) 10 min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



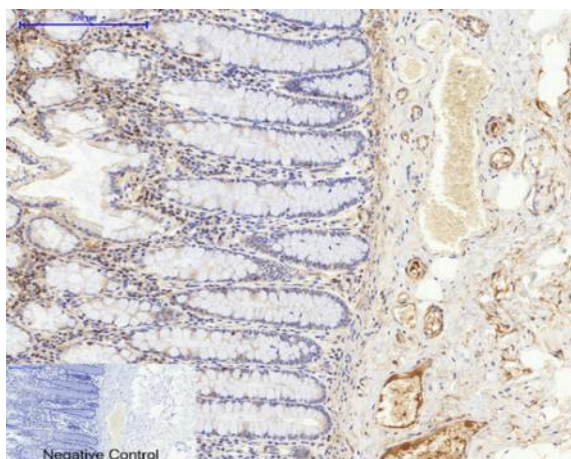
Western Blot analysis of 1, hela 2, A549 3, HEPG2 4, Mouse-brain 5, Mouse-lung 6, Mouse-liver 7, Rat-brain 8, Rat-lung 9, Rat-liver cells using primary antibody diluted at 1:1000 (4 °C overnight). Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25 °C, 1 hour). Cell lysate was extracted by Minute™ Plasma Membrane Protein Isolation and Cell Fractionation Kit (SM-005, Invent biotech, MN, USA).



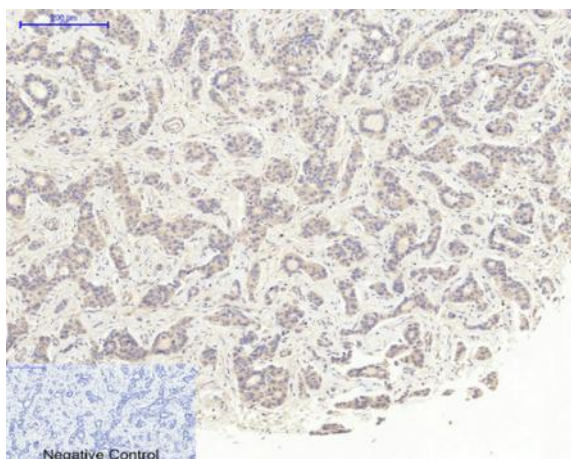
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20 min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30 min). Negative control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



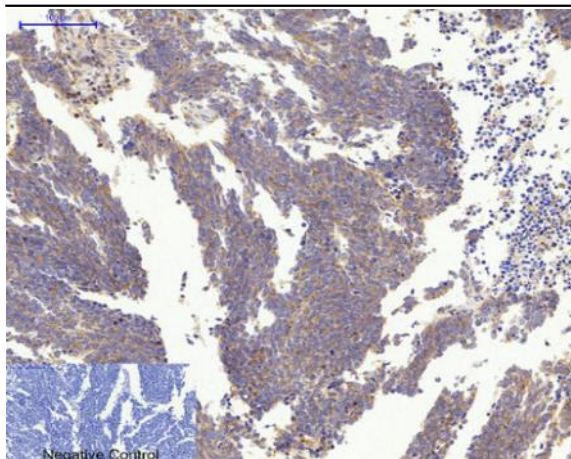
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative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



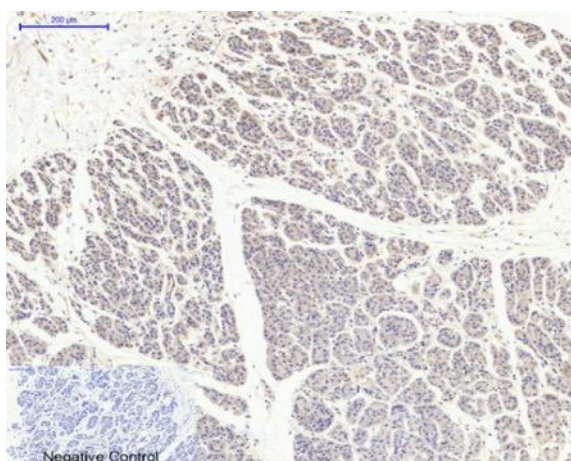
Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control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



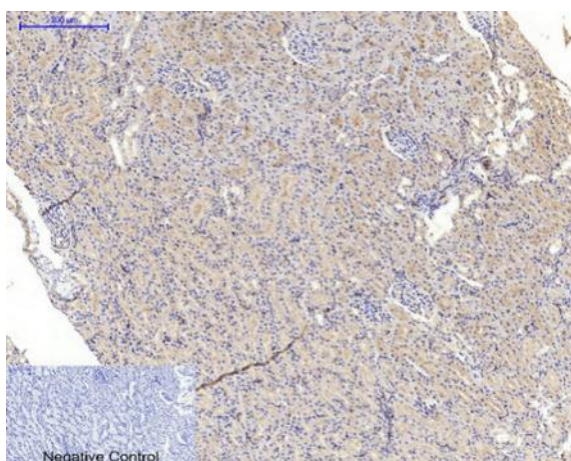
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200 (4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 °C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative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



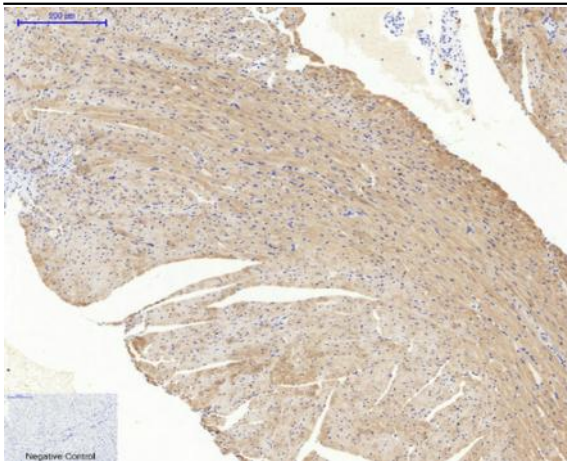
Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control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



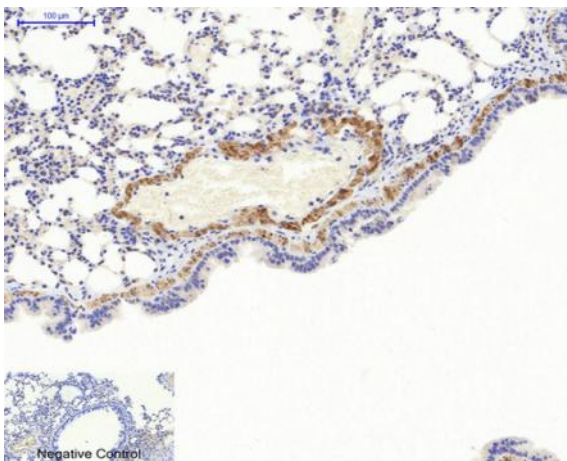
Immunohistochemical analysis of paraffin-embedded Human-stomach-cancer tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control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



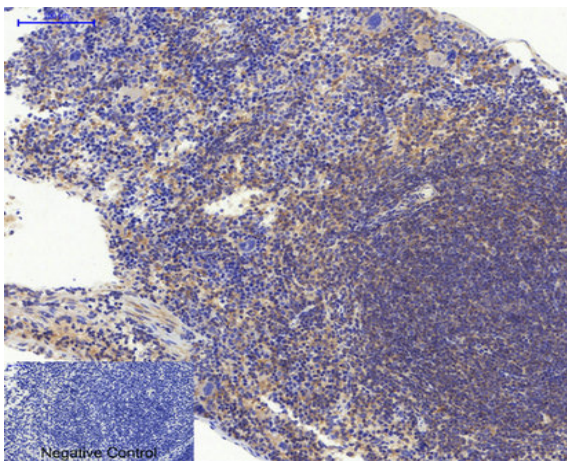
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used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



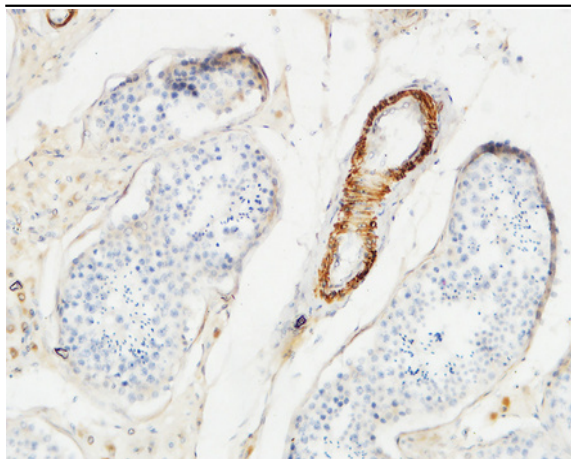
Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1, Actin β Polyclonal Antibody was diluted at 1:200(4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was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



Immunohistochemical analysis of paraffin-embedded Mouse-lung tissue. 1, Actin β 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, Actin β 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 testis. 1, Antibody was diluted at 1:100(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).