

**GAPDH Monoclonal Antibody(2B8)**

<b>Catalog No :</b>	YM3029
<b>Reactivity :</b>	Human,Rat,Mouse,Mk,Dg,Ch,Hamster,Rb,Pig,sheep,Insect,Yeast
<b>Applications :</b>	WB,IF/ICC,IHC-p
<b>Gene Name :</b>	GAPDH
<b>Protein Name :</b>	Glyceraldehyde-3-phosphate dehydrogenase
<b>Human Gene Id :</b>	2597
<b>Human Swiss Prot No :</b>	P04406
<b>Mouse Gene Id :</b>	100042025
<b>Mouse Swiss Prot No :</b>	P16858
<b>Rat Gene Id :</b>	24383
<b>Rat Swiss Prot No :</b>	P04797
<b>Immunogen :</b>	Synthetic Peptide of GAPDH
<b>Specificity :</b>	The antibody detects endogenous GAPDH protein.
<b>Formulation :</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source :</b>	Mouse
<b>Dilution :</b>	WB: 1:5000-20000 IHC: 1:200-300 IF 1:200
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Storage Stability :</b>	-20°C/1 year

**Observed Band :** 37**Cell Pathway :** Glycolysis / Gluconeogenesis,Alzheimer's disease,**Background :**

glyceraldehyde-3-phosphate dehydrogenase(GAPDH) Homo sapiens This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against E. coli, P. aeruginosa, and C. albicans. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferri

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**Function :**

catalytic activity:D-glyceraldehyde 3-phosphate + phosphate + NAD(+) = 3-phospho-D-glyceroyl phosphate + NADH.,function:Independent of its glycolytic activity it is also involved in membrane trafficking in the early secretory pathway.,online information:Glyceraldehyde 3-phosphate dehydrogenase entry,pathway:Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1.,pathway:Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 1/5.,PTM:Reversible S-nitrosylation of Cys-152 inhibits enzymatic activity and increases endogenous ADP-ribosylation, which inhibits the enzyme in a non-reversible manner. The latter modification is more likely to be a pathophysiological event associated with inhibition of gluconeogenesis.,sequence caution:Differs quite extensively.,similarity:Belongs to the glyceraldehyde-3-phosphate dehydrogenase fami

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**Subcellular Location :**

nucleus,cytoplasm,lipid particle,cytosol,plasma membrane,microtubule cytoskeleton,membrane,intracellular ribonucleoprotein complex,extracellular matrix,nuclear membrane,vesicle,intracellular membrane-bounded orga

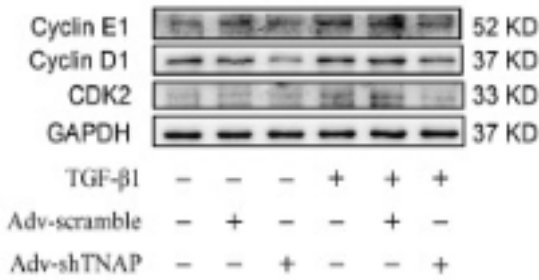
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**Expression :** Astrocytoma,Brain,Cajal-Retzius cell,Colon adenocarcinoma,Epitheliu

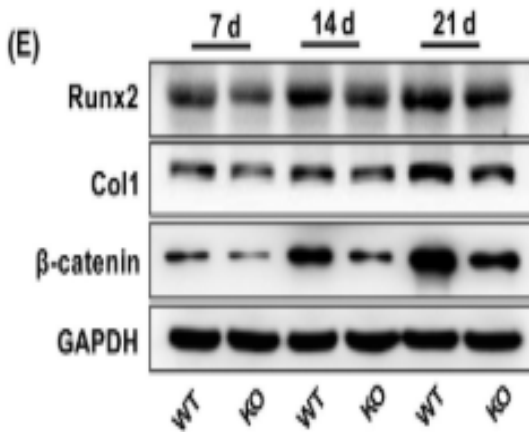
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## Products Images

**b**



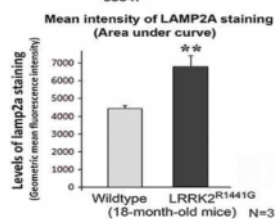
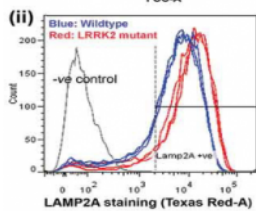
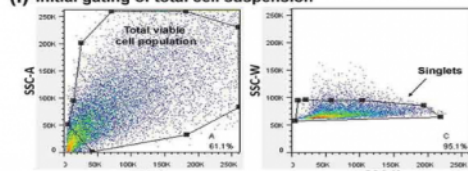
Cheng, Xiaocheng, et al. "TNAP is a novel regulator of cardiac fibrosis after myocardial infarction by mediating TGF-β/Smads and ERK1/2 signaling pathways." *EBioMedicine* 67 (2021): 103370.



Wang, Yingying, et al. "p75NTR<sup>-/-</sup> mice exhibit an alveolar bone loss phenotype and inhibited PI3K/Akt/β-catenin pathway." *Cell proliferation* 53.4 (2020): e12800.

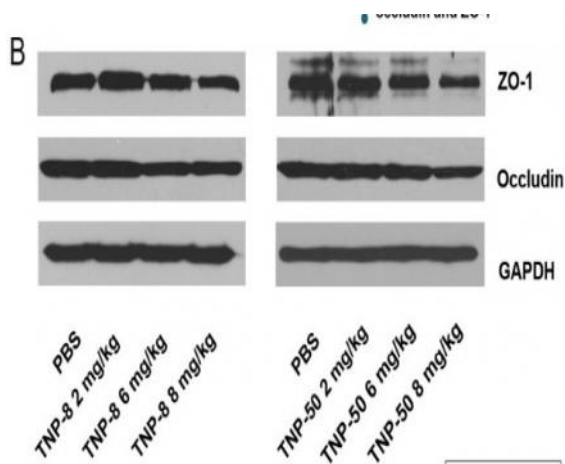
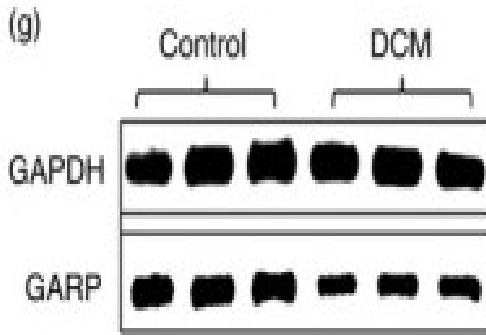
**(b) VENTRAL MIDBRAIN WHOLE CELL SUSPENSION**

**(i) Initial gating of total cell suspension**

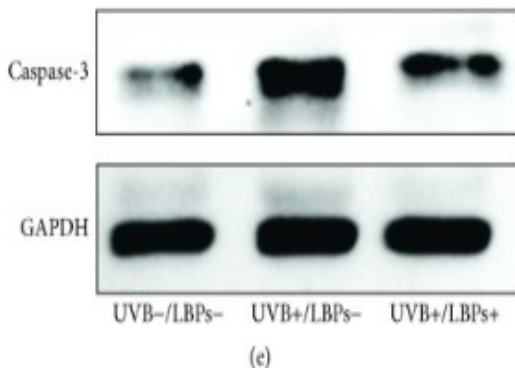


Ho, Philip Wing-Lok, et al. "Age-dependent accumulation of oligomeric SNCA/α-synuclein from impaired degradation in mutant LRRK2 knockin mouse model of Parkinson disease: role for therapeutic activation of chaperone-mediated autophagy (CMA)." *Autophagy* 16.2 (2020): 347-370.

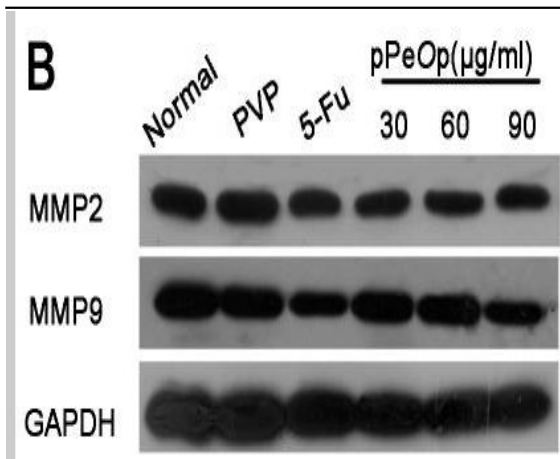
Wei, Yuzhen, et al. "CD4+ CD25+ GARP+ regulatory T cells display a compromised suppressive function in patients with dilated cardiomyopathy." *Immunology* 151.3 (2017): 291-303.



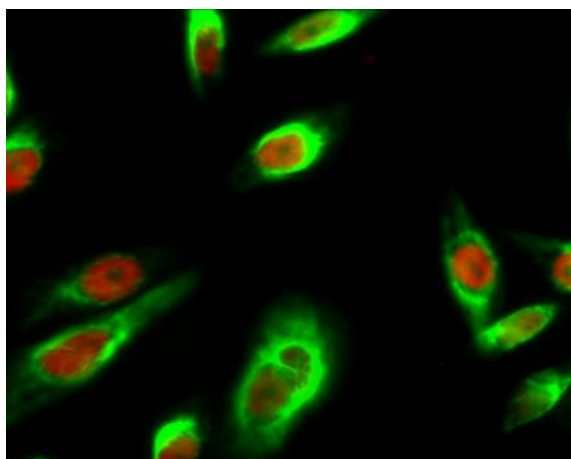
Zhang, Chengke, et al. "Induction of size-dependent breakdown of blood-milk barrier in lactating mice by TiO<sub>2</sub> nanoparticles." *PloS one* 10.4 (2015): e0122591.



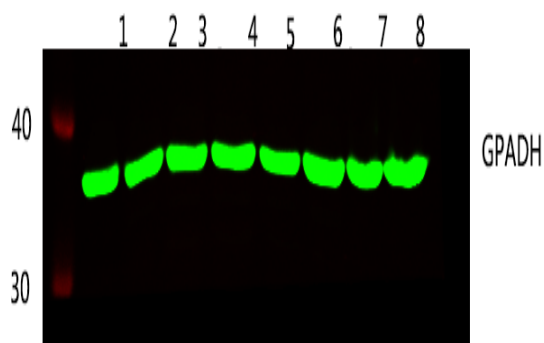
Du, Shaobo, et al. "Lycium barbarum Polysaccharides Protect Rat Corneal Epithelial Cells against Ultraviolet B-Induced Apoptosis by Attenuating the Mitochondrial Pathway and Inhibiting JNK Phosphorylation." *BioMed research international* 2017 (2017).



Chen, Luchao, et al. "Effects of purified Omphalia lapidescens protein on metastasis, cell cycle, apoptosis and the JAK-STAT signaling pathway in SGC-7901 human gastric cells." *Oncology letters* 15.4 (2018): 4161-4170.

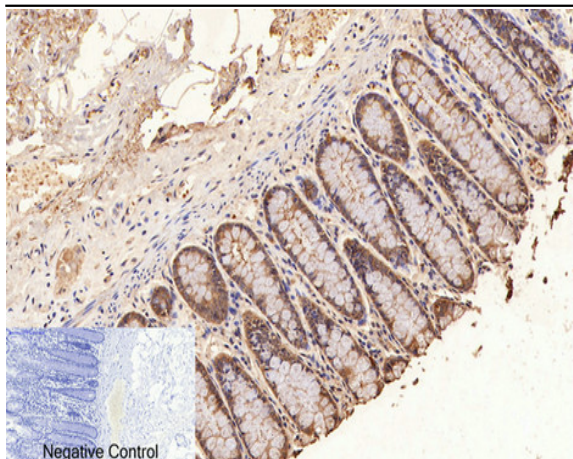


Immunofluorescence analysis of HeLa cell. 1, Cyclin D1 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). GAPDH Monoclonal Antibody (2B8) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).

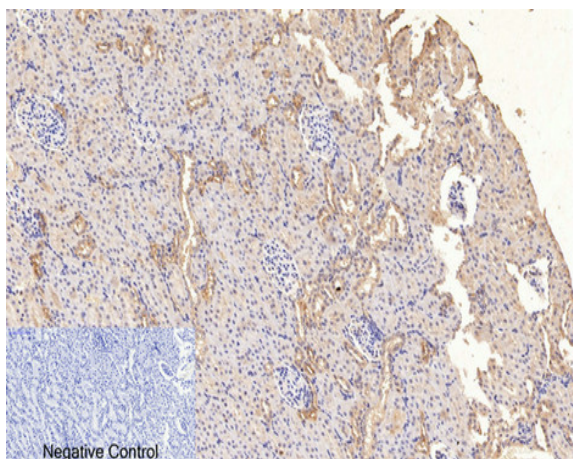


Western blot analysis of 1 HEK293 2 SW480 3 HEPG2 4 MCF-7 5 mouse brain 6 Rat brain 7 HeLa 8 A549 lysates, primary antibody was diluted at 1:5000, 4° over night, secondary antibody (cat: RS23910) was diluted at 1:10000, 37° 1 hour.

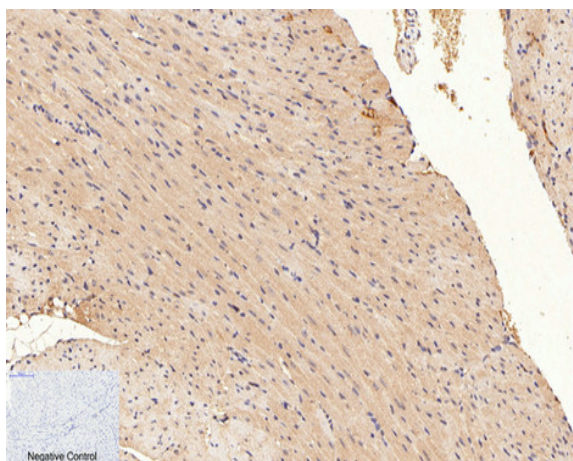




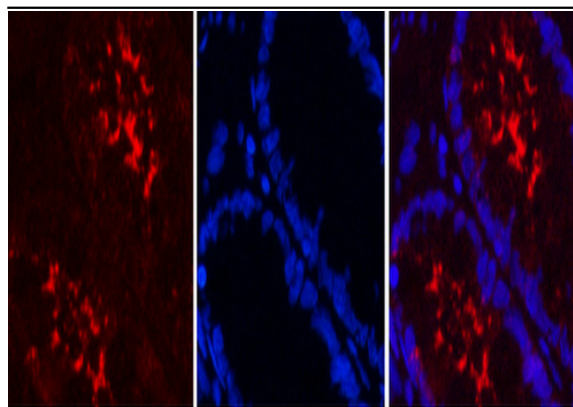
Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1, GAPDH Monoclonal Antibody(2B8) was diluted at 1:200(4 °C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98 °C, 20min). 3, Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1, GAPDH Monoclonal Antibody(2B8) 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, GAPDH Monoclonal Antibody(2B8) 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.

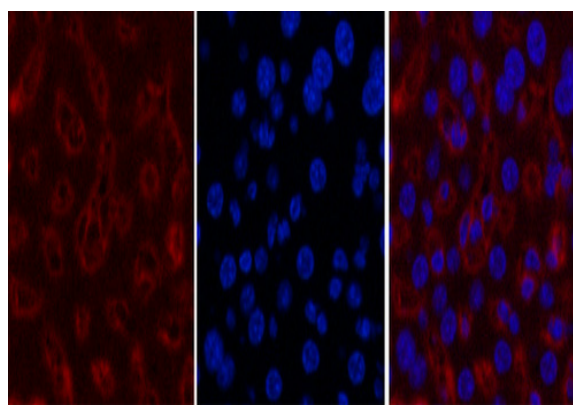


A

B

C

Immunofluorescence analysis of Human-colon tissue. 1, GAPDH Monoclonal Antibody(2B8)(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

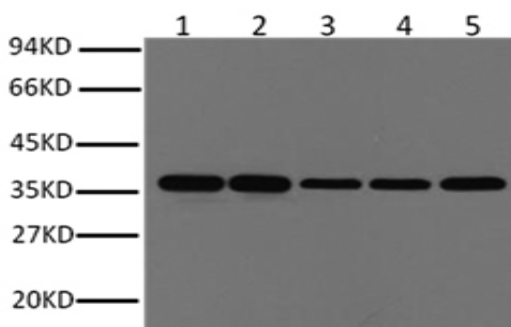


A

B

C

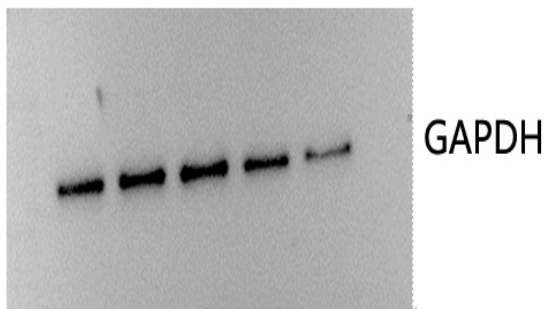
Immunofluorescence analysis of Mouse-liver tissue. 1, GAPDH Monoclonal Antibody(2B8)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of HeLa (1), Rat brain (2), Rabbit Muscle (3), Sheep Muscle (4), and Mouse brain (5), diluted at 1:10000.

### RAW 264.7

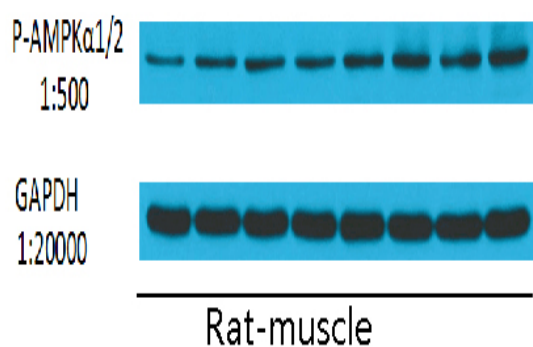
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Huaiyin Normal University

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