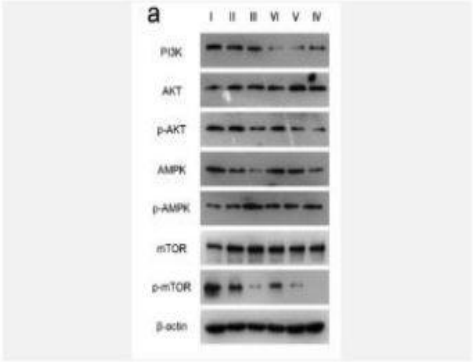
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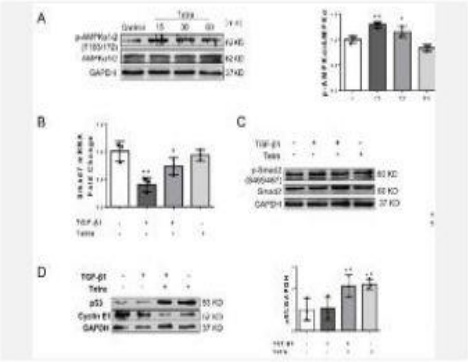
AMPKα1/2 (phospho Thr183/172) Polyclonal Antibody

Catalog No.	IPH0009
Reactivity	Human;Mouse;Rat;Monkey;Pig
Applications	IF; WB; IHC; ELISA
Gene Name	AAPK1/AAPK2
Protein Name	5'-AMP-activated protein kinase catalytic subunit alpha-1/2
Human Gene Id	5562/5563
Swiss-Prot	Q13131/P54646
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit
Dilution	IF: 1:50-200 WB: 1:500-1:2000 IHC: 1:100-1:300 ELISA: 1:40000
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration	1 mg/ml
Storage&Stability	-20°C/1 year
Background	The protein encoded by this gene belongs to the ser/thr protein kinase family. It is the catalytic subunit of the 5'-prime-AMP-activated protein kinase (AMPK). AMPK is a cellular energy sensor conserved in all eukaryotic cells. The kinase activity of AMPK is activated by the stimuli that increase the cellular AMP/ATP ratio. AMPK regulates the activities of a number of key metabolic enzymes through phosphorylation. It protects cells from stresses that cause ATP depletion by switching off ATP-consuming biosynthetic pathways. Alternatively spliced transcript variants encoding distinct isoforms have been observed.
Subcellular Location	Cytoplasm. Nucleus. In response to stress, recruited by p53/TP53 to specific promoters.
BiowMW	63kD (Observed)

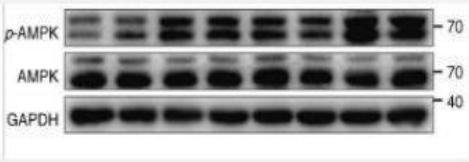
Products Images:



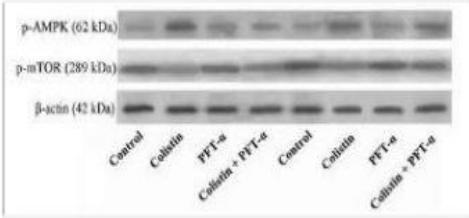
Kang, Min, et al. "Autophagy was activated against the damages of placentas caused by nano-copper oral exposure." Ecotoxicology and Environmental Safe
(2021): 112364.



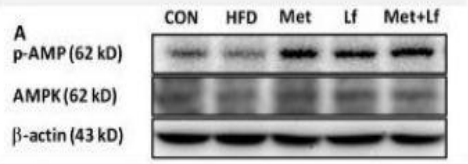
Gao, L., Wang, Ly., Liu, Zq. et al. TNAP inhibition attenuates cardiac fibrosis induced by myocardial infarction through deactivating TGF-β1/Smads and activating P53 signaling pathways. Cell Death Dis 11, 44 (2020)



Guo, Hui-Hui, et al. "Liver-target nanotechnology facilitates berberine to ameliorate cardio-metabolic diseases." Nature communications 10.1 (2019): 1981.

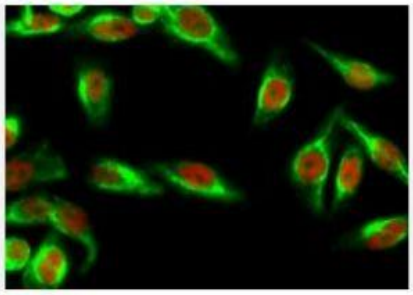


Zhang, Ling, et al. "P53 mediates colistin-induced autophagy and apoptosis in PC-12 cells." Antimicrobial agents and chemotherapy (2016): AAC-00641.

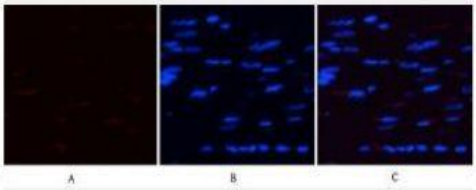


Min, Qing-Qing, et al. "Effects of Metformin Combined with Lactoferrin on Lipid Accumulation and Metabolism in Mice Fed with High-Fat Diet." Nutrients 10.11 (2018): 1628.

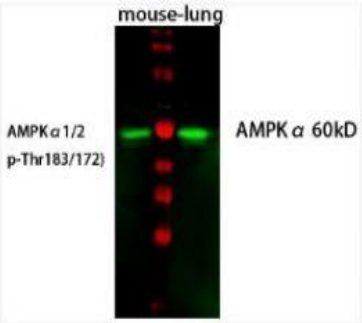
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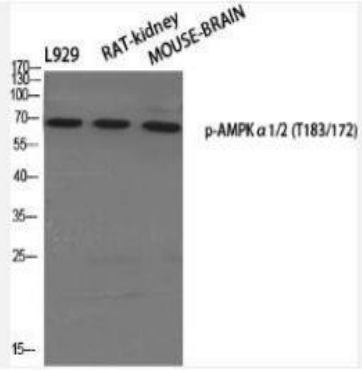
Immunofluorescence analysis of Hela cell. 1,AMPKα1/2 (phospho Thr183/172) Polyclonal Antibody(green) was diluted at 1:200(4° overnight). (red) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog:RS3211 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog:RS3608 was diluted at 1:1000(room temperature, 50min).



Immunofluorescence analysis of rat-heart tissue. 1,AMPKα1/2 (phospho Thr183/172) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled 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

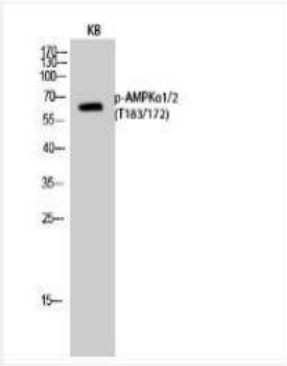


Western Blot analysis of mouse-lung cells using primary antibody diluted at 1:1000(4°C overnight). Secondary antibody:Goat Anti-rabbit IgG IRDye 800(diluted at 1:5000, 25°C, 1 hour). Cell lysate was extracted by Minute™ Plasma Membrane Protein Isolation and Cell Fractionation Kit(SM-005, Inventbiotech,MN,USA).

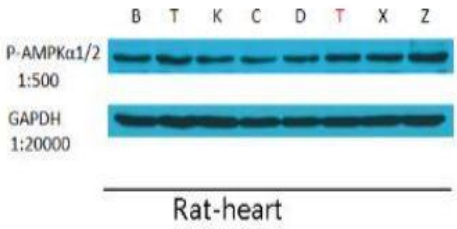


Western Blot analysis of various cells using Phospho-AMPKα1/2 (T183/172) Polyclonal Antibody diluted at 1:500

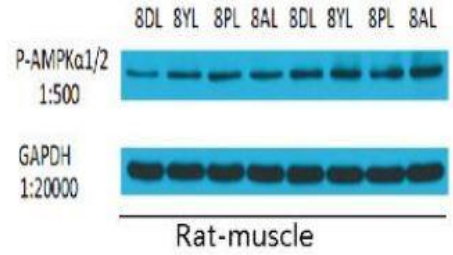
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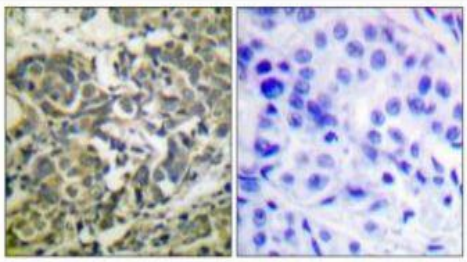
Western Blot analysis of KB cells using Phospho-AMPKα1/2 (T183/172) Polyclonal Antibody diluted at 1:500



The picture was kindly provided by our customer

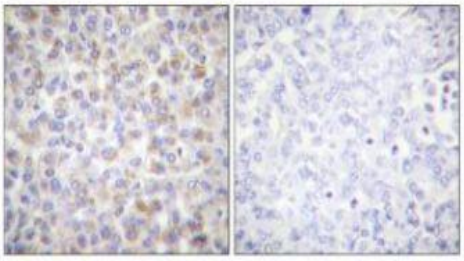


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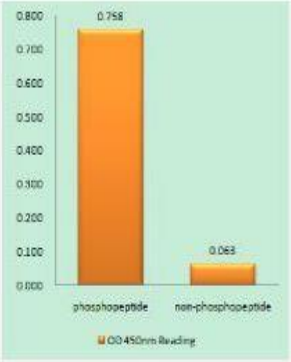


Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

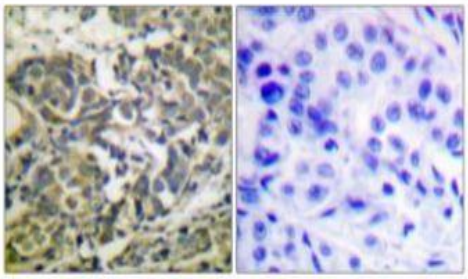
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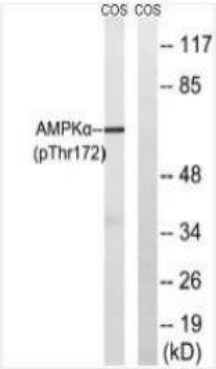
Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using AMPK alpha (Phospho-Thr172) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using AMPK alpha (Phospho-Thr172) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from COS7 cells, using AMPK alpha (Phospho-Thr172) Antibody. The lane on the right is blocked with the phospho peptide.