

Prohibitin Rabbit mAb

Catalog No: #48650



Package Size: #48650-1 50ul #48650-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)  
Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

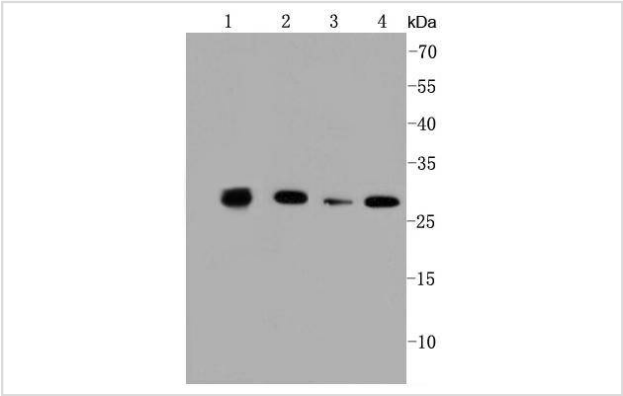
Description

Product Name	Prohibitin Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SR46-02
Purification	ProA affinity purified
Applications	WB, ICC, IHC, IP, FC
Species Reactivity	Hu, Ms, Rt, zebrafish
Immunogen Description	recombinant protein
Other Names	Epididymis luminal protein 215 antibody Epididymis secretory sperm binding protein Li 54e antibody HEL 215 antibody HEL S 54e antibody PHB antibody PHB_HUMAN antibody PHB1 antibody Prohibitin antibody
Accession No.	Swiss-Prot#:P35232
Uniprot	P35232
GeneID	5245;
Calculated MW	30 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

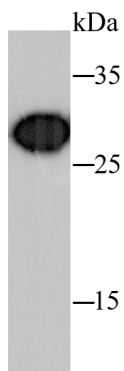
Application Details

WB: 1:1,000-1:2,000 IHC: 1:200-1:500 ICC: 1:50-1:200FC: 1:50-1:100

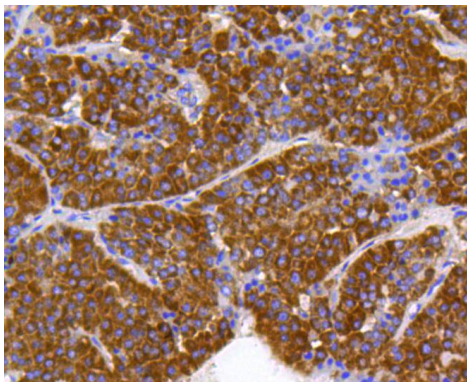
Images



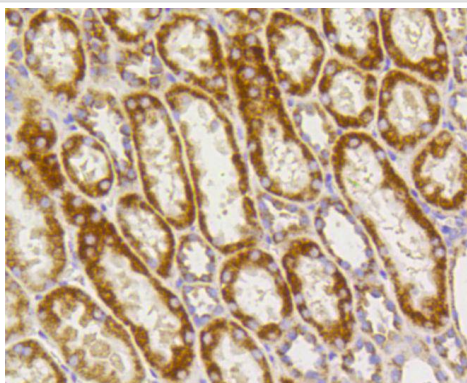
Western blot analysis of Prohibitin on different lysates using anti-Prohibitin antibody at 1/1,000 dilution. Positive control:  
Lane 1: 293  
Lane 2: Jurkat  
Lane 3: Mouse kidney  
Lane 4: HepG2



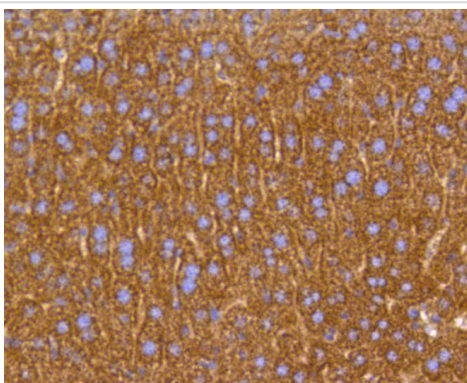
Western blot analysis of Prohibitin on hybrid fish (crucian-carp) liver tissue lysate using anti-Prohibitin antibody at 1/500 dilution.



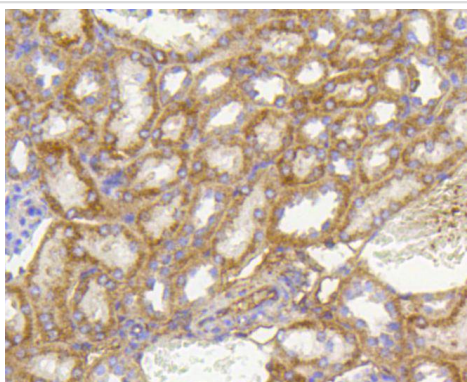
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue using anti-Prohibitin antibody. Counter stained with hematoxylin.



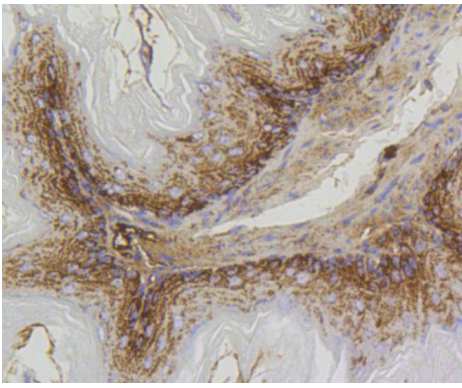
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Prohibitin antibody. Counter stained with hematoxylin.



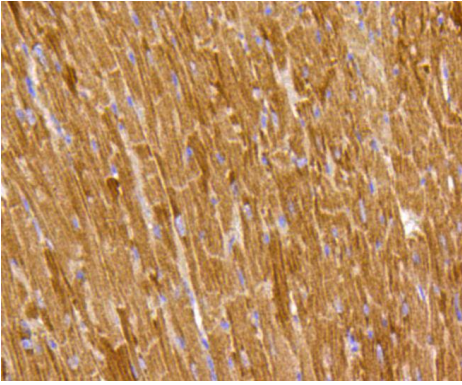
Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-Prohibitin antibody. Counter stained with hematoxylin.



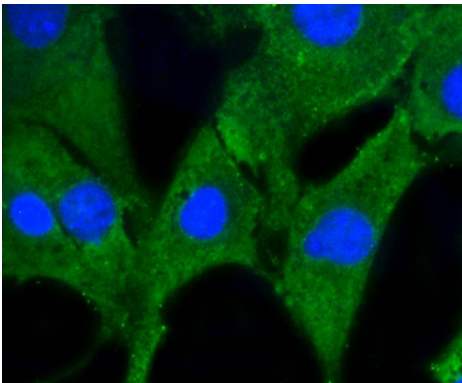
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue using anti-Prohibitin antibody. Counter stained with hematoxylin.



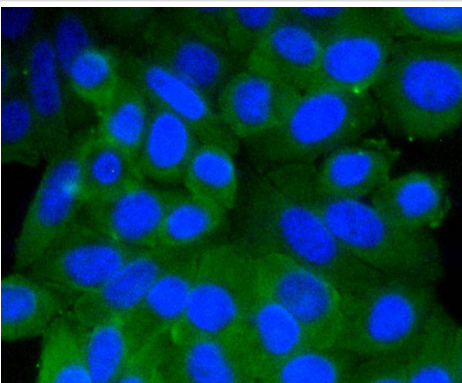
Immunohistochemical analysis of paraffin-embedded mouse stomach tissue using anti-Prohibitin antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-Prohibitin antibody. Counter stained with hematoxylin.



ICC staining Prohibitin in NIH/3T3 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Prohibitin in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

## Background

Prohibitin is an evolutionarily conserved protein that has antiproliferative activity. The gene encoding human prohibitin maps to chromosome 17q21 and is ubiquitously expressed. Prohibitin is a post-synthetically modified protein that is localized in the inner membrane of mitochondria, where it regulates the cell cycle by blocking the transition between the G1 and S phases, and on the plasma membrane of B cells, where it mediates B cell maturation. Prohibitin mRNA and protein levels are high in G1, decline during the S phase, rise again in G2 and decline in M phase, which suggests that prohibitin controls the cell cycle by using both transcriptional and posttranslational mechanisms. Prohibitin is also a potential tumor suppressor protein that binds to retinoblastoma (Rb) and subsequently inhibits the activity of E2F family members in response to specific signaling cascades. Prohibitin 2 is a repressor of estrogen receptor activity, and is required for somatic and germline differentiation in the larval gonad during embryonic

development. Mutations in the Prohibitin genes are correlated with breast cancer development and/or progression in more than 80% of the cell lines analyzed.

## References

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Note: This product is for in vitro research use only