Prohibitin (Mitochondrial Marker) Antibody

Mouse Monoclonal Antibody [Clone PHB/3194]

Catalog No	Format	Size
5245-MSM4-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5245-MSM4-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5245-MSM4-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

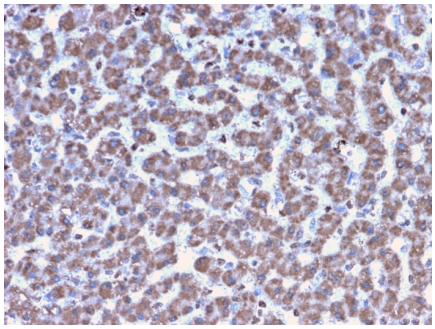
Applications	Tested Dillution	Note
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

Product Details

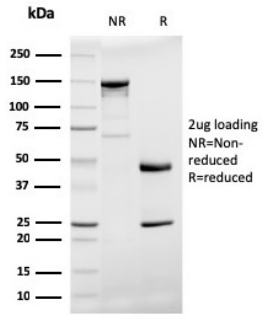
Clone	PHB/3194
Gene Name	PHB1
Immunogen	Recombinant human PHB protein fragment (aa167-261) (exact sequence is proprietary)
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	30kDa
Cellular Localization	Cell membrane, Cytoplasm, Mitochondrion inner membrane, Nucleus
Species Reactivity	Human
Positive Control	A431 or MCF-7 cells (IF). Liver, Heart or Endometrium (IHC)., HEK293, HePG2, Jurkat, K562, Kidney, Ramos

**Optimal dilution for a specific application should be determined.*

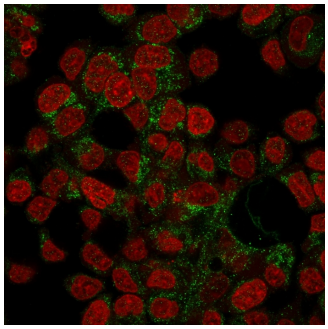
Product Images for Prohibitin (Mitochondrial Marker) Antibody



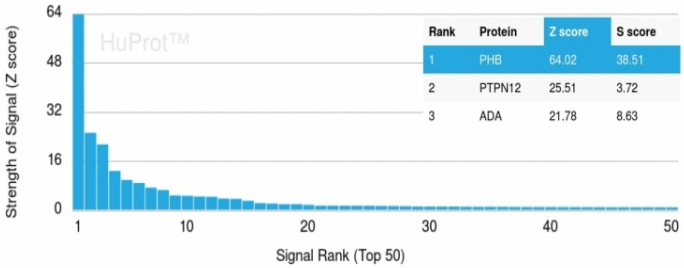
Formalin-fixed, paraffin-embedded human Liver stained with Prohibitin Mouse Monoclonal Antibody (PHB/3194).



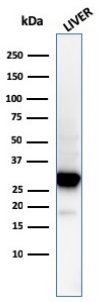
SDS-PAGE Analysis Purified Prohibitin Mouse Monoclonal Antibody (PHB/3194). Confirmation of Purity and Integrity of Antibody.



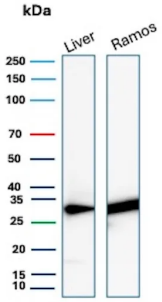
Confocal Immunofluorescence of HepG2 cells stained with Prohibitin Mouse Monoclonal Antibody (PHB/3194) labeled with CF488 (Green); Reddot is used to label the nuclei.



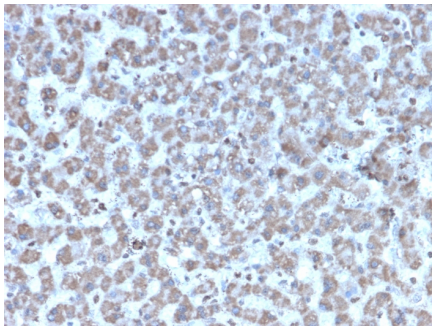
Analysis of Protein Array containing more than 19,000 full-length human proteinsusing Monospecific Mouse Monoclonal Antibody to Prohibitin (PHB/3194). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.



Western Blot Analysis of human liver tissue lysate using Prohibitin Mouse Monoclonal Antibody (PHB/3194).



Western Blot Analysis of human Liver and Ramos lysates using Prohibitin Mouse Monoclonal Antibody (PHB/3194).



Formalin-fixed, paraffin-embedded human Liver stained with Prohibitin Mouse Monoclonal Antibody (PHB/3194).

Specificity & Comments

Recognizes a protein of 30kDa which is identified as Prohibitin, an evolutionarily conserved protein with homologues found in yeast to man. It is located in the inner membrane of mitochondria. Although prohibitin mRNA and protein expression occurs throughout the cell cycle, maximum levels are detected during the G1/S phase transition and minimum levels are seen in S phase and the G2/mitosis boundary. Prohibitin is located exclusively in the mitochondria with the highest concentration on the inner membrane. Prohibitin is an ideal mitochondrial marker. It shows antiproliferative activity and has been proposed to play a role in normal cell cycle regulation, replicative senescence, cellular immortalization, and tumor suppression.

Supplied As

200ug/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Cardiovascular, Infectious Disease, Mitochondria Marker, Signal Transduction

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis.There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.