

36-2934: Anti-Prohibitin (Mitochondrial Marker) Monoclonal Antibody(Clone: PHB/3194)

Clonality :	Monoclonal
Clone Name :	PHB/3194
Application :	WB,IF,IHC
Reactivity :	Human
Gene :	PHB
Gene ID :	5245
Uniprot ID :	P35232
Alternative Name :	Epididymis luminal protein 215; Epididymis secretory sperm binding protein Li 54e; HEL 215; HEL S 54e; PHB; PHB1; Prohibitin
Isotype :	Mouse IgG2b, kappa
Immunogen Information :	Recombinant human PHB protein fragment (aa167-261) (exact sequence is proprietary)

Description

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.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/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 condition :	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.

Application Note

Western Blot (1-2ug/ml); Immunofluorescence (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes 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);

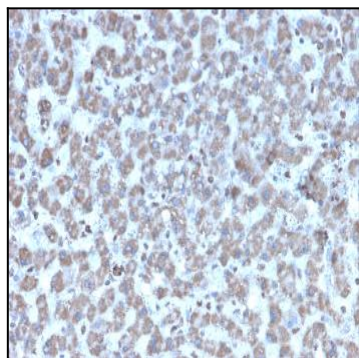


Fig. 1: Formalin-fixed, paraffin-embedded human Liver stained with Prohibitin Mouse Monoclonal Antibody (PHB/3194).

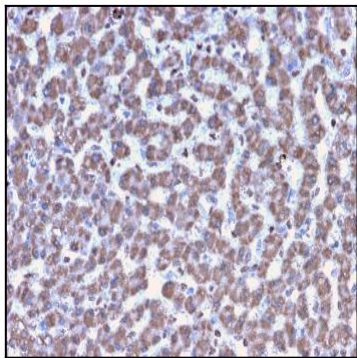


Fig. 2: Formalin-fixed, paraffin-embedded human Liver stained with Prohibitin Mouse Monoclonal Antibody (PHB/3194).

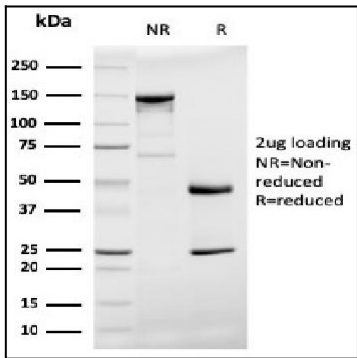


Fig. 3: SDS-PAGE Analysis Purified Prohibitin Mouse Monoclonal Antibody (PHB/3194). Confirmation of Purity and Integrity of Antibody.

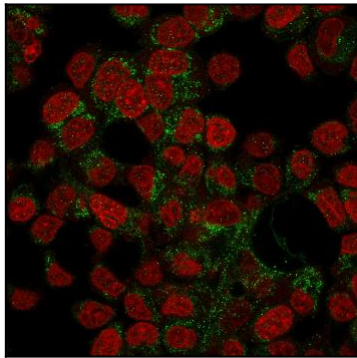


Fig. 4: Confocal Immunofluorescence of HepG2 cells stained with Prohibitin Mouse Monoclonal Antibody (PHB/3194) labeled with CF488 (Green); Reddot is used to label the nuclei.

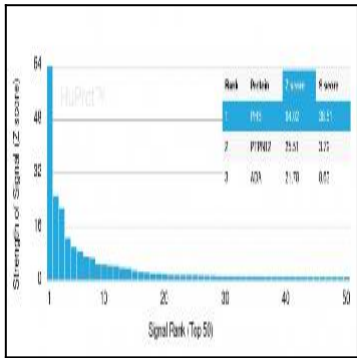


Fig. 5: Analysis of Protein Array containing more than 19,000 full-length human proteins using Monospecific Mouse Monoclonal Antibody to Prohibitin (PHB/3194). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ 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 HuProt™ 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 be 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.

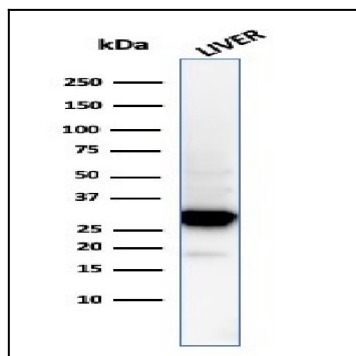


Fig. 6: Western Blot Analysis of human liver tissue lysate using Prohibitin Mouse Monoclonal Antibody (PHB/3194).