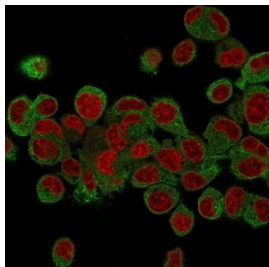


## Prohibitin Antibody / PHB [clone PHB/3231] (V7629)

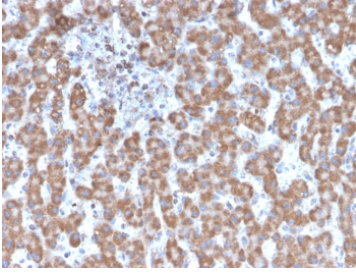
Catalog No.	Formulation	Size
V7629-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7629-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7629SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7629IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

[Bulk quote request](#)

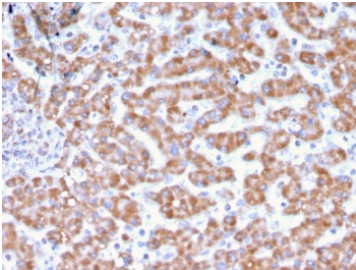
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG1, kappa
<b>Clone Name</b>	PHB/3231
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P35232
<b>Localization</b>	Cytoplasmic
<b>Applications</b>	Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT (1) Western Blot : 2-4ug/ml
<b>Limitations</b>	This Prohibitin antibody is available for research use only.



Immunofluorescence staining of human HepG2 cells with Prohibitin antibody (green, clone PHB/3231) and Reddot nuclear stain (red).

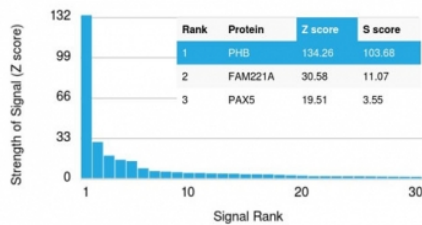


IHC testing of FFPE human liver tissue with Prohibitin antibody (clone PHB/3231). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



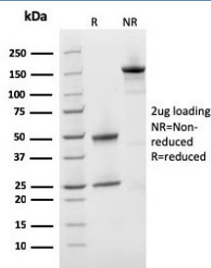
IHC testing of FFPE human liver tissue with Prohibitin antibody (clone PHB/3231). Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

#### Human Protein Microarray Specificity Validation

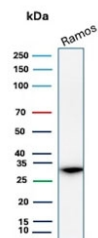


Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Prohibitin antibody (clone PHB/3231). These results demonstrate the foremost specificity of the PHB/3231 mAb.

Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free Prohibitin antibody (clone PHB/3231) as confirmation of integrity and purity.



Western blot testing of human Ramos cell lysate with Prohibitin antibody (clone PHB/3231). Expected molecular weight ~30 kDa.

## Description

This antibody recognizes a protein of 30kDa which is identified as Prohibitin (PHB), an evolutionarily conserved protein with homologues found in yeast to man. It is located in the inner membrane of mitochondria. Although PHB 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. It is an ideal mitochondrial marker. It shows anti-proliferative

activity and has been proposed to play a role in normal cell cycle regulation, replicative senescence, cellular immortalization, and tumor suppression.

## Application Notes

Optimal dilution of the Prohibitin antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

A recombinant human partial protein corresponding to amino acids 167-261 was used as the immunogen for the Prohibitin antibody.

## Storage

Store the Prohibitin antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).