

## Prohibitin Mitochondrial Marker Conjugated Antibody

Catalog No: #C48231



Package Size: #C48231-AF350 100ul #C48231-AF405 100ul #C48231-AF488 100ul

#C48231-AF555 100ul #C48231-AF594 100ul #C48231-AF647 100ul

#C48231-AF680 100ul #C48231-AF750 100ul #C48231-Biotin 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Prohibitin Mitochondrial Marker Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu, Ms, Rt
Immunogen Description	peptide
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
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;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	30kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## Application Details

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250

AF405 conjugated: most applications: 1: 50 - 1: 250

AF488 conjugated: most applications: 1: 50 - 1: 250

AF555 conjugated: most applications: 1: 50 - 1: 250

AF594 conjugated: most applications: 1: 50 - 1: 250

AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250

AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Background

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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.

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Note: This product is for in vitro research use only