



# Rabbit Anti-PHB monoclonal antibody, clone TS57-13 (CABT-L585)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Target</b>	Prohibitin
<b>Immunogen</b>	Recombinant protein
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human, Mouse, Rat, zebrafish
<b>Clone</b>	TS57-13
<b>Purification</b>	Protein A purified.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB, ICC, IHC, IP, FC
<b>Molecular Weight</b>	30 kDa
<b>Cellular Localization</b>	Mitochondrion inner membrane.
<b>Positive Control</b>	NIH/3T3, Jurkat, HepG2, human liver cancer tissue, mouse stomach tissue, human kidney tissue, mouse heart tissue, mouse liver tissue, mouse kidney tissue.
<b>Format</b>	Liquid
<b>Size</b>	100 µl
<b>Buffer</b>	1×TBS (pH7.4), 1% BSA, 40% Glycerol.

<b>Preservative</b>	0.05% Sodium Azide
<b>Storage</b>	Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

## BACKGROUND

<b>Introduction</b>	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.
<b>Keywords</b>	Epididymis luminal protein 215;Epididymis secretory sperm binding protein Li 54e;HEL 215;HEL S 54e;PHB;PHB_HUMAN;PHB1;Prohibitin antibody