

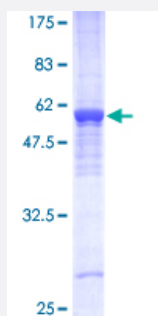
Full-Length

PHB (Human) Recombinant Protein (P01)

Catalog # H00005245-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human PHB full-length ORF (AAH13401, 1 a.a. - 272 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MAAKVFESIGKFGLALAVAGGVVNSALYNVDAGHRAVVFDRFRGVQDMVGEGTHFLIPWVQKPIIFDCRSRPRNPVITGSKDLQNVNITLRLFRPVASQLPRIFTSIGEDYDERVLPSITTEILKSVMARFDAGELITQRELVSQRVSDDLTERAATFGLILDDVSLTHLTFGKEFTEAVEAKQVAQQEAERARFVVEKAEQQKKAIIAEGDSKAAELIANSLATAGDGLIELRKLEAAGDIAYQLSRSRNITYLPAGQSVLLQLPQ

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

55.66

Interspecies Antigen Sequence

Mouse (99); Rat (99)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PHB

Entrez GeneID[5245](#)**GeneBank Accession#**[BC013401](#)**Protein Accession#**[AAH13401](#)**Gene Name**

PHB

Gene Alias

PHB1

Gene Description

prohibitin

Omim ID[176705](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

Prohibitin is an evolutionarily conserved gene that is ubiquitously expressed. It is thought to be a negative regulator of cell proliferation and may be a tumor suppressor. Mutations in PHB have been linked to sporadic breast cancer. Prohibitin is expressed as two transcripts with varying lengths of 3' untranslated region. The longer transcript is present at higher levels in proliferating tissues and cells, suggesting that this longer 3' untranslated region may function as a trans-acting regulatory RNA. [provided by RefSeq]

Other Designations

-

Publication Reference

- [Activation of AMP-activated protein kinase \(AMPK\) through inhibiting interaction with prohibitins.](#)

Shuhei Kanagaki, Yusuke Tsutsui, Naoki Kobayashi, Takashi Komine, Minoru Ito, Yuniike Akasaka, Michiaki Nagasawa, Tomohiro Ide, Naoki Omae, Kazuhisa Nakao, Makoto Rembutsu, Maki Iwago, Aki Yonezawa, Yusei Hosokawa, Tetsuya Hosooka, Wataru Ogawa, Koji Murakami.

iScience 2023 Feb; 26(4):106293.

Application: Pull-Down, Recombinant proteins

- [C9orf72 regulates energy homeostasis by stabilizing mitochondrial complex I assembly.](#)

Tao Wang, Honghe Liu, Kie Itoh, Sungtaek Oh, Liang Zhao, Daisuke Murata, Hiromi Sesaki, Thomas Hartung, Chan Hyun Na, Jiou Wang.

Cell Metabolism 2021 Mar; 33(3):531.

Application: PI, WB-Re, Recombinant proteins

- [Prohibitin interacts with phosphatidylinositol 3,4,5-triphosphate \(PIP3\) and modulates insulin signaling.](#)

Ande SR, Mishra S.

Biochemical and Biophysical Research Communications 2009 Dec; 390(3):1023.

Application: Func, WB-Re, WB-Re

Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Lung Neoplasms](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)