

PRODUCT DATASHEET

Peptidase inhibitor 16 Human HEK293

Cat. No.: RD172165100

Type: Recombinant protein

Size: 0.1 mg

Source: HEK293

Species: Human

Description

Total 426 AA. MW 45.7 kDa (calculated), C-Terminal Flag-tag (11 extra AA). UniProt entry Q6UXB8.

Other names

PI-16, Cysteine-rich secretory protein 9, CRISP-9, PSP94-binding protein, PSP94-BP, PI16, CRISP9, PSPBP, Peptidase inhibitor 16

Introduction to the molecule

PSP94BP (PSPBP, Peptidase inhibitor 16, CRISP-9, PI-16) is a cell-surface-expressed type II transmembrane serine protease and was identified as one of the most highly upregulated genes in prostate cancer. PSP94BP protein expression was highest at sites of bone metastasis and in late-stage primary tumor, suggesting a role in tumor progression. In accordance, in vivo studies demonstrated that overexpression of PSP94BP led to tumor progression and metastasis. As PSP94BP expression correlates well with prostate cancer progression, it was proposed as a diagnostic marker and target for prostate cancer therapy.

Research topic

Oncology

Amino Acid sequence

LTDEEKRLMV ELHNLYRAQV SPPASDMLHM RWDEELAAFA KAYARQCVWG HNKERGRGE NLFAITDEGM DVPLAMEEWH HEREHYNLSA
ATCSPGQMC G HYTQVWAKT ERIGCGSHFC EKLQGV EETN IELLVCNYEP PGNVKGKRPY QEGTPCSQCP SGYHCKNSLC EPIGSPEDAQ
DLPYLVT EAP SFRATEASDS RKMGT PSSLA TGIP AFLVTE VSGSLATKAL PAVETQAPTS LATKDPPSMA TEAPPCVTTE VPSILAAHSL
PSLDEE PVT F PKSTHVPIPK SADKVT DTK VPSRSPENSL DPKMSLTGAR ELLPHAQEEA EAEALPPSS EVLASVFPAQ DKPGELQATL
DHTGHTSSKS LPNFPNTSAT ANATGGRALA LQSSLPGAEG PDKPSVVSGL NSGPGAAADY KDDDDK

Purity

Purity as determined by densitometric image analysis > 95%

Endotoxin

< 0.1 EU/μg

Formulation:

Filtered (0,4 μm) and lyophilized in 0.5 mg/mL in 20mM TRIS, 50mM NaCl, pH 7.5

Reconstitution:

Add deionized water to prepare a working stock solution of 0.5 mg/mL and let the lyophilized pellet dissolve completely. Product is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -80°C . Lyophilized protein remains stable until the expiry date when stored at -80°C . Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

Quality control

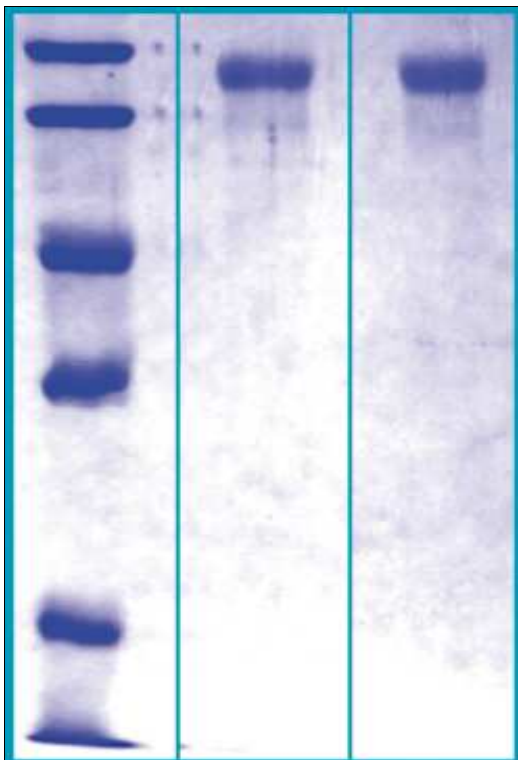
BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

LAL to determine quantity of endotoxin.

Applications

Cell culture and/or animal studies, ELISA, Western blotting



12% SDS-PAGE separation of Human Peptidase inhibitor 16

1. M.W. marker – 14, 21, 31, 45, 66, 97 kDa
2. reduced and boiled sample, 5 μg / lane
3. non-reduced and non-boiled sample, 5 μg / lane