

# Recombinant human PTDSR/JMJD6 protein

Catalog Number: ATGP2999

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

1-414aa

### UniProt No.

Q6NYC1

### NCBI Accession No.

NP\_001074930

### Alternative Names

Jumonji domain containing 6, Arginine demethylase and lysine hydroxylase, Phosphatidylserine receptor, KIAA0585

## PRODUCT SPECIFICATION

---

### Molecular Weight

50kDa (437aa)

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 30% glycerol, 1mM DTT

### Purity

> 90% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

JMJD6 also known as bifunctional arginine demethylase and lysyl-hydroxylase JMJD6. JMJD6 acts as a lysyl-hydroxylase that catalyzes 5-hydroxylation on specific lysine residues of target proteins such as u2AF2/u2AF65 and LuC7L2, as a regulator of RNA splicing by mediating 5-hydroxylation of u2AF2/u2AF65, affecting the pre-mRNA splicing activity of u2AF2/u2AF65. In addition to peptidyl-lysine 5-dioxygenase activity, may act as an RNA hydroxylase, as suggested by its ability to bind single strand RNA. Also acts as an arginine demethylase which

# Recombinant human PTDSR/JMJD6 protein

Catalog Number: ATGP2999

demethylates histone H3 at 'Arg-2' (H3R2me) and histone H4 at 'Arg-3' (H4R3me), thereby playing a role in histone code. Recombinant human JMJD6, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

<MGSSHHHHHH SSSLVPRGSH MGS>MNHKSKK RIREAKRSAR PELKDSL DWT RHNYYESFSL SPAAVADNVE  
RADALQLSVE EFVERYERPYPY KPVVLLNAQE GWSAQEKWTL ERLKRKYRNQ KFKCGEDNDG YSVKMKMKYY IEYMESTRDD  
SPLYIFDSSY GEHPKRRKLL EDYKVPKFFT DDLFQYAGEK RRPPYRWFVM GPPRSGTGIH IDPLGTSAWN ALVQGHKRWC  
LFPTSTPREL IKVTRDEGGN QQDEAITWFN VIYPRTQLPT WPPEFKPLEI LQKPGETVFV PGGWWHVVLN LDTTIAITQN  
FASSTNFPVV WHKTVRGRPK LSRKWYRILK QEHPELAVLA DSVDLQESTG IASDSSSDSS SSSSSSSSDS DSECEGSEG  
DGTVHRRKKR RTCSMVGN GD TTSQDDCVSK ERSSSRIRD T CGGRAHP

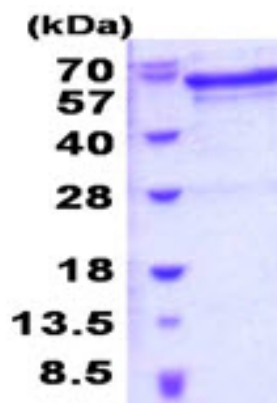
## General References

Hong X. et al. (2010) Proc. Natl. Acad. Sci. u.S.A. 107:14568-14572.

Webby C.J. et al. (2009) Science 325:90-93.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)