

# Recombinant human CTDSP1 protein

Catalog Number: ATGP1013

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-260aa

### UniProt No.

Q9GZU7

### NCBI Accession No.

NP\_872580

### Alternative Names

Carboxy-terminal domain RNA polymerase II polypeptide A phosphatase 1, Carboxy-terminal domain, RNA polymerase II, polypeptide A phosphatase 1, NLIIF, SCP1, NIF3

## PRODUCT SPECIFICATION

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### Molecular Weight

31.2 kDa (280aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol, 0.1M NaCl

### 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

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### Description

Carboxy-terminal domain, RNA polymerase II, polypeptide A phosphatase 1, also known as CTDSP1, is a class 2C phosphatase with activity dependent on the conserved DxD motif. CTDSP1 preferentially catalyzes the dephosphorylation of 'Ser-5' within the tandem 7 residues repeats in the C-terminal domain (CTD) of the largest RNA polymerase II subunit POLR2A. Also it negatively regulates RNA polymerase II transcription, possibly by controlling the transition from initiation/capping to processive transcript elongation. Recombinant human

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CTDSP1 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

### Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MDSSAVITQI SKEEARGPLR GKGDQKSAAS QKPRSRGILH SLFCCVCRDD GEALPAHSGA  
PLLVEENGAI PKTPVQYLLP EAKAQDSDKI CVVIDLDETL VHSSFKPVNN ADFIIPVEID GVVHQVYVLK RPHVDEFLQR  
MGELFECVLF TASLAKYADP VADLLDKWGA FRARLFRESC VFHRGNYVKD LSRLGRDLRR VLILDNSPAS YVFHPDNAV  
VASWFDNMSD TELHDLLPFF EQLSRVDDVY SVLRQPRPGS

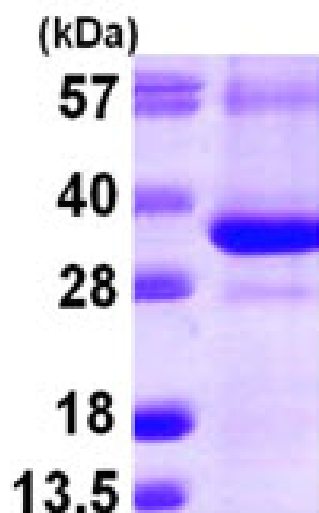
### General References

Maiello B., et al. (2001) *Front Biosci.* 6: 1358-1368.

Palancade B., et al. (2004) *J Mol Biol.* 335:415-424.

## DATA

### SDS-PAGE



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

15% SDS-PAGE (3ug)