

# Recombinant human Oct-3/4 protein

Catalog Number: ATGP1948

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-265aa

### UniProt No.

Q01860

### NCBI Accession No.

NP\_001272916

### Alternative Names

POU domain, class 5, transcription factor 1 isoform 3, Oct-3, Oct-4, OCT3, OCT4, OTF-3, OTF3, OTF4

## PRODUCT SPECIFICATION

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### Molecular Weight

32.2 kDa (285aa)

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

### Purity

> 85% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE, Denatured

### 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

POU domain, class 5, transcription factor 1, also known as OCT4, binds to the octamer motif (5'-ATTTGCAT-3'). This protein forms a trimeric complex with SOX2 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, uTF1 and ZFP206. It is critical for early embryogenesis and for embryonic stem cell pluripotency. Recombinant human OCT4 protein, fused to His-tag at N-terminus, was expressed in E. coli.

## Recombinant human Oct-3/4 protein

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### Amino acid Sequence

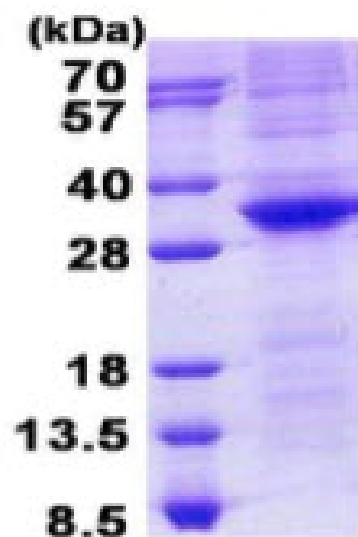
MGSSHHHHHH SSGLVPRGSH MHFYRLFLGA TRRFLNPEWK GEIDNWCVYV LTSLLPFKIQ SQDIKALQKE LEQFAKLLKQ  
KRITLGYTQA DVGLTLGVLF GKVFSQTTIC RFEALQLSFK NMCKLRPLLQ KWVEEADNNE NLQEICKAET LVQARKRKRT  
SIENRVRGNL ENLFLQCPKP TLQQISHIAQ QLGLEKDVVR VWFCNRRQKG KRSSSDYAQR EDFEAAGSPF SGGPVSFPLA  
PGPHFGTPGY GSPHFTALYS SVPFPEGEAF PPSVTTLGS PMHSN

### General References

Takahashi K., et al. (2007) Cell. 131:861-872  
Lee J., et al. (2008) Int. J. Biochem. Cell Biol. 40:1043-1054

## DATA

### SDS-PAGE



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

15% SDS-PAGE (3ug)