

POU Class 5 Homeobox 1 Recombinant Protein | POU5F1 recombinant protein

Recombinant Human POU Class 5 Homeobox 1 Polyarginine-Tag

CATALOG # AAA38910	HOST E Coli
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PRODUCT SYNONYMS

POU Class 5 Homeobox 1; Recombinant Human POU Class 5 Homeobox 1 Polyarginine-Tag; POU domain class 5 transcription factor 1; Octamer-binding protein 3; Oct-3; Octamer-binding protein 4; Oct-4; Octamer-binding transcription factor 3; OTF-3; POU5F1; OCT3; OCT4; OTF3; OTF4; MGC22487.; POU5F1 recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95.0% as determined by: (a) Analysis by SEC-HPLC. (b) Analysis by SDS-PAGE.
Form/Format	POU5F1 0.2µm filtered solution (1mg/ml) in PBS, pH7.4 and 5% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence	Thesequenc eofthefirs tfiveN-ter minalamino acidswasde terminedan dwasfoundt obeMet-Ala -Gly-His-L eu
Sequence Length	265
Source	Escherichia Coli.
Physical Appearance	Sterile filtered colorless solution.
Preparation and Storage	Store at 4 degree C if entire vial will be used within 2-4 weeks. Store, frozen at -20 degree C for longer periods of time. Avoid multiple freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for POU5F1 recombinant protein	Description: POU5F1 Human Recombinant produced in E Coli is a single, non-glycosylated, Polypeptide chain containing 360 amino acids and having a molecular mass of 38.6kDa. The POU5F1 is fused to a C-terminal poly-arginine tag and purified by proprietary chromatographic techniques. Introduction: POU5F1 is a homeodomain transcription factor of the POU family, expressed in embryonic stem (ES) cells and embryonic carcinoma (EC) cells. POU5F1 is significantly involved in the signaling pathway for maintaining self-renewal and pluripotency of ES cells. POU5F1 has 2 distinct DNA binding domains which independently bind half-sites of the canonical octamer motif. This flexibility allows POU5F1 to bind with distinct DNA motifs by forming heterodimers with other transcription factors or by forming homodimers in several conformations. Human POU5F1 contains a 75aa POU specific (POUS) domain and a 60aa POU-Homeo-(POUH) domain connected by a linker region. The Human POU5F1 specifically interacts with Octamer motif ATGCAAAT. In addition, 2 proline-rich domains in the N-terminal and C-terminal regions are vital for POU5F1 transactivation. POU5F1 regulates a number of target genes and has been shown to work jointly with other transcription factors including Sox2 as well as Nanog to sustain stem cell potency and self-renewal.
Product Categories/Family for POU5F1 recombinant protein	Recombinant & Natural Proteins; Recombinant Proteins; POU Class

NCBI AND UNIPROT INFORMATION

NCBI GI #	553727233
NCBI GeneID	5460

NCBI Accession #	NP_001272916.1
NCBI GenBank Nucleotide #	NM_001285987.1
UniProt Accession #	Q01860 ; P31359 ; Q15167 ; Q15168 ; Q16422 ; Q5STF3 ; Q5STF4 ; A6NCS1 ; A6NLL8 ; D2IYK4
NCBI Official Full Name	POU domain, class 5, transcription factor 1 isoform 3
NCBI Official Synonym Full Names	POU class 5 homeobox 1
NCBI Official Symbol	POU5F1
NCBI Official Synonym Symbols	OCT3; OCT4; OTF3; OTF4; OTF-3; Oct-3; Oct-4
NCBI Protein Information	POU domain, class 5, transcription factor 1; POU domain transcription factor OCT4; POU-type homeodomain-containing DNA-binding protein; octamer-binding protein 3; octamer-binding protein 4; octamer-binding transcription factor 3
UniProt Protein Name	POU domain, class 5, transcription factor 1
UniProt Gene Name	POU5F1
UniProt Synonym Gene Names	OCT3; OCT4; OTF3; Oct-3; Oct-4; OTF-3
UniProt Entry Name	PO5F1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/pou5f1-recombinant-protein-e-coli/38910>