

Product datasheet for **TP762703**

Oct4 (POU5F1) (NM_002701) Human Recombinant Protein

Product data:

| | |
|---------------------------------------|---|
| Product Type: | Recombinant Proteins |
| Description: | Purified recombinant protein of Human POU class 5 homeobox 1 (POU5F1/OCT4), transcript variant 1, 1Met-160Leu, with N-terminal His tag, expressed in E.coli, 50ug |
| Species: | Human |
| Expression Host: | E. coli |
| Expression cDNA Clone or AA Sequence: | A DNA sequence encoding the region (1Met-160Leu) of OCT4 |
| Tag: | N-His |
| Predicted MW: | 18.6 kDa |
| Concentration: | >0.05 ug/ul as determined by microplate BCA method |
| Purity: | > 80% as determined by SDS-PAGE and Coomassie blue staining |
| Buffer: | 25mM Tris, 150mM NaCl, 10% glycerol, pH8.0, 1% SKL |
| Storage: | Store at -80°C after receiving vials. |
| Stability: | Stable for at least 1 year from receipt of products under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. |
| RefSeq: | NP_002692 |
| Locus ID: | 5460 |
| UniProt ID: | Q01860 , D2IYK3 |
| RefSeq Size: | 1417 |
| Cytogenetics: | 6p21.33 |
| RefSeq ORF: | 1080 |
| Synonyms: | Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF3; OTF4 |



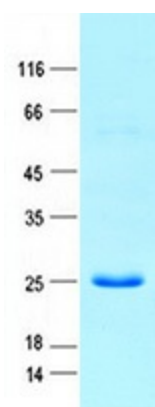
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Summary:

This gene encodes a transcription factor containing a POU homeodomain that plays a key role in embryonic development and stem cell pluripotency. Aberrant expression of this gene in adult tissues is associated with tumorigenesis. This gene can participate in a translocation with the Ewing's sarcoma gene on chromosome 21, which also leads to tumor formation. Alternative splicing, as well as usage of alternative AUG and non-AUG translation initiation codons, results in multiple isoforms. One of the AUG start codons is polymorphic in human populations. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12. [provided by RefSeq, Oct 2013]

Protein Families:

Adult stem cells, Cancer stem cells, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors

Product images:

Coomassie blue staining of purified OCT4 protein (Cat #TP762703). The protein was produced from E.coli.