

Product datasheet for **RC229658L4V**

Oct4 (POU5F1) (NM_001173531) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Oct4 (POU5F1) (NM_001173531) Human Tagged ORF Clone Lentiviral Particle
Symbol:	POU5F1
Synonyms:	Oct-3; Oct-4; OCT3; OCT4; OTF-3; OTF3; OTF4
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001173531
ORF Size:	1083 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC229658).
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
RefSeq:	NM_001173531.2 , NP_001167002.1
RefSeq Size:	1589 bp
RefSeq ORF:	573 bp
Locus ID:	5460
Cytogenetics:	6p21.33
Protein Families:	Adult stem cells, Cancer stem cells, Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors
MW:	38.6 kDa


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Gene 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]