

## Product datasheet for **RC217994L3V**

### **POLR3G (NM\_006467) Human Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	POLR3G (NM_006467) Human Tagged ORF Clone Lentiviral Particle
Symbol:	POLR3G
Synonyms:	C31; RPC7; RPC32
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_006467
ORF Size:	669 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC217994).
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. <a href="#">More info</a>
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:	<a href="#">NM_006467.1</a>
RefSeq Size:	1000 bp
RefSeq ORF:	672 bp
Locus ID:	10622
UniProt ID:	<a href="#">O15318</a>
Cytogenetics:	5q14.3
Protein Pathways:	Cytosolic DNA-sensing pathway, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase



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**MW:** 25.7 kDa

**Gene Summary:** DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Specific peripheric component of RNA polymerase III which synthesizes small RNAs, such as 5S rRNA and tRNAs (PubMed:20154270). May direct with other members of the RPC3/POLR3C-RPC6/POLR3F-RPC7/POLR3G subcomplex RNA Pol III binding to the TFIIB-DNA complex via the interactions between TFIIB and POLR3F. May be involved either in the recruitment and stabilization of the subcomplex within RNA polymerase III, or in stimulating catalytic functions of other subunits during initiation. Plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as nuclear and cytosolic DNA sensor involved in innate immune response. Can sense non-self dsDNA that serves as template for transcription into dsRNA. The non-self RNA polymerase III transcripts, such as Epstein-Barr virus-encoded RNAs (EBERs), induce type I interferon and NF- Kappa-B through the RIG-I pathway (PubMed:19609254, PubMed:19631370).[UniProtKB/Swiss-Prot Function]