

Product datasheet for **MR200389L4V**

Pold4 (NM_027196) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Pold4 (NM_027196) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Pold4
Synonyms:	2410012M21Rik; A1463381; AW060307; p12; Polds
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_027196
ORF Size:	321 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR200389).
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_027196.3
RefSeq Size:	933 bp
RefSeq ORF:	324 bp
Locus ID:	69745
UniProt ID:	Q9CWP8
Cytogenetics:	19 A



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Gene Summary:

As a component of the tetrameric DNA polymerase delta complex (Pol-delta4), plays a role in high fidelity genome replication and repair. Within this complex, increases the rate of DNA synthesis and decreases fidelity by regulating POLD1 polymerase and proofreading 3' to 5' exonuclease activity. Pol-delta4 participates in Okazaki fragment processing, through both the short flap pathway, as well as a nick translation system. Under conditions of DNA replication stress, required for the repair of broken replication forks through break-induced replication (BIR), a mechanism that may induce segmental genomic duplications of up to 200 kb. Involved in Pol-delta4 translesion synthesis (TLS) of templates carrying O6-methylguanine or abasic sites. Its degradation in response to DNA damage is required for the inhibition of fork progression and cell survival.[UniProtKB/Swiss-Prot Function]