

## Product datasheet for **RR213145L4V**

### **Pdcd6 (NM\_001107452) Rat Tagged ORF Clone Lentiviral Particle**

#### **Product data:**

Product Type:	Lentiviral Particles
Product Name:	Pdcd6 (NM_001107452) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Pdcd6
Synonyms:	ALG-2
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001107452
ORF Size:	573 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR213145).
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_001107452.1</a> , <a href="#">NP_001100922.1</a>
RefSeq Size:	1531 bp
RefSeq ORF:	576 bp
Locus ID:	308061
UniProt ID:	<a href="#">G3V7W1</a>
Cytogenetics:	1p11



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**Gene Summary:**

Calcium sensor that plays a key role in processes such as endoplasmic reticulum (ER)-Golgi vesicular transport, endosomal biogenesis or membrane repair (By similarity). Acts as an adapter that bridges unrelated proteins or stabilizes weak protein-protein complexes in response to calcium: calcium-binding triggers exposure of apolar surface, promoting interaction with different sets of proteins thanks to 3 different hydrophobic pockets, leading to translocation to membranes (By similarity). Involved in ER-Golgi transport (PubMed:27276012). Regulates ER-Golgi transport by promoting the association between PDCD6IP and TSG101, thereby bridging together the ESCRT-III and ESCRT-I complexes (By similarity). Together with PEF1, acts as calcium-dependent adapter for the BCR(KLHL12) complex, a complex involved in ER-Golgi transport by regulating the size of COPII coats (By similarity). In response to cytosolic calcium increase, the heterodimer formed with PEF1 interacts with, and bridges together the BCR(KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export, which is required for neural crest specification (By similarity). Involved in the regulation of the distribution and function of MCOLN1 in the endosomal pathway (By similarity). Promotes localization and polymerization of TFG at endoplasmic reticulum exit site (By similarity). Required for T-cell receptor-, Fas-, and glucocorticoid-induced apoptosis (By similarity). May mediate Ca(2+)-regulated signals along the death pathway: interaction with DAPK1 can accelerate apoptotic cell death by increasing caspase-3 activity (By similarity). Its role in apoptosis may however be indirect, as suggested by knockout experiments (By similarity). May inhibit KDR/VEGFR2-dependent angiogenesis; the function involves inhibition of VEGF-induced phosphorylation of the Akt signaling pathway (By similarity).[UniProtKB/Swiss-Prot Function]