

Product datasheet for RR208953L4

Asna1 (NM_001100505) Rat Tagged Lenti ORF Clone

Product data:

OriGene Technologies, Inc.

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Product Type:	Expression Plasmids
Product Name:	Asna1 (NM_001100505) Rat Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Asna1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR208953)
Restriction Sites:	Sgfl-Mlul
Cloning Scheme:	Cloning sites used for ORF Shuttling: Sgf 1 ORF Mlu 1 GCG ATC GC ATG NNN ACG CGT
	Kozak

 $\frac{EcoR I}{T} = \frac{BamH I}{R} = \frac{RBS}{Sgf I} = \frac{Sgf I}{R} = \frac{Sgf I}{T} = \frac{Sgf I}{R} = \frac{Sgf I}{R$

* The last codon before the Stop codon of the ORF.

ACCN: ORF Size: NM_001100505 1044 bp



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ORIGENE Asna1 (NM_001100505) Rat Tagged Lenti ORF Clone – RR208953L4	
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. <u>More info</u>
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Metho	 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	<u>NM 001100505.1, NP 001093975.1</u>
RefSeq Size:	1365 bp
RefSeq ORF:	1047 bp
Locus ID:	288919
UniProt ID:	<u>G3V9T7</u>
Cytogenetics:	19q11
Gene Summary:	ATPase required for the post-translational delivery of tail-anchored (TA) proteins to the endoplasmic reticulum. Recognizes and selectively binds the transmembrane domain of TA proteins in the cytosol. This complex then targets to the endoplasmic reticulum by membrane-bound receptors GET1/WRB and CAMLG/GET2, where the tail-anchored protein is released for insertion. This process is regulated by ATP binding and hydrolysis. ATP binding drives the homodimer towards the closed dimer state, facilitating recognition of newly synthesized TA membrane proteins. ATP hydrolysis is required for insertion. Subsequently, the homodimer reverts towards the open dimer state, lowering its affinity for the GET1- CAMLG receptor, and returning it to the cytosol to initiate a new round of targeting.

[UniProtKB/Swiss-Prot Function]

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