

Product datasheet for **TR713119**

Fxyd2 Rat shRNA Plasmid (Locus ID 29639)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Fxyd2 Rat shRNA Plasmid (Locus ID 29639)
Locus ID:	29639
Synonyms:	ATP1C; Atp1g1; GNAKATP
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Fxyd2 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 29639). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_017349 , NM_145717 , NM_017349.1 , NM_017349.2 , NM_145717.1
UniProt ID:	Q04679
Summary:	<p>This gene encodes a member of a family of small membrane proteins that share a 35-amino acid signature sequence domain, beginning with the sequence PFXYD and containing 7 invariant and 6 highly conserved amino acids. This gene, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. Related gene family members have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members, with the N-terminus extracellular and the C-terminus on the cytoplasmic side of the membrane. The Type III integral membrane protein encoded by this gene is the gamma subunit of the Na,K-ATPase present on the plasma membrane. Although the Na,K-ATPase does not depend on the gamma subunit to be functional, it is thought that the gamma subunit modulates the enzyme's activity by inducing ion channel activity. Two transcript variants have been described for this gene that encode distinct isoforms. [provided by RefSeq, Jan 2010]</p>
shRNA Design:	These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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**Performance
Guaranteed:**

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).