

## Product datasheet for **TL319583**

### **FXYD1 Human shRNA Plasmid Kit (Locus ID 5348)**

#### **Product data:**

Product Type:	shRNA Plasmids
Product Name:	FXYD1 Human shRNA Plasmid Kit (Locus ID 5348)
Locus ID:	5348
Synonyms:	PLM
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	FXYD1 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 5348). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_001278717</a> , <a href="#">NM_001278718</a> , <a href="#">NM_005031</a> , <a href="#">NM_021902</a> , <a href="#">NM_005031.1</a> , <a href="#">NM_005031.2</a> , <a href="#">NM_005031.3</a> , <a href="#">NM_005031.4</a> , <a href="#">NM_021902.1</a> , <a href="#">NM_021902.2</a> , <a href="#">NM_021902.3</a> , <a href="#">NM_001278717.1</a> , <a href="#">NM_001278718.1</a> , <a href="#">BC032800</a> , <a href="#">BC032800.2</a> , <a href="#">BM691130</a> , <a href="#">BM856555</a> , <a href="#">NM_021902.4</a> , <a href="#">NM_005031.5</a> , <a href="#">NM_001278718.2</a>
UniProt ID:	<a href="#">O00168</a>



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<b>Summary:</b>	<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. The approved human gene nomenclature for the family is FXYD-domain containing ion transport regulator. Mouse FXYD5 has been termed RIC (Related to Ion Channel). FXYD2, also known as the gamma subunit of the Na,K-ATPase, regulates the properties of that enzyme. FXYD1 (phospholemman), FXYD2 (gamma), FXYD3 (MAT-8), FXYD4 (CHIF), and FXYD5 (RIC) have been shown to induce channel activity in experimental expression systems. Transmembrane topology has been established for two family members (FXYD1 and FXYD2), with the N-terminus extracellular and the C-terminus on the cytoplasmic side of the membrane. The protein encoded by this gene is a plasma membrane substrate for several kinases, including protein kinase A, protein kinase C, NIMA kinase, and myotonic dystrophy kinase. It is thought to form an ion channel or regulate ion channel activity. Transcript variants with different 5' UTR sequences have been described in the literature. [provided by RefSeq, Jul 2008]</p>
<b>shRNA Design:</b>	<p>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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a>.</p>
<b>Performance Guaranteed:</b>	<p>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.</p> <p>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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).</p>