

Product datasheet for **TR519118**

Lynx1 Mouse shRNA Plasmid (Locus ID 23936)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Lynx1 Mouse shRNA Plasmid (Locus ID 23936)
Locus ID:	23936
Synonyms:	AI838844; SLURP-2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Lynx1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 23936). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC037541 , NM_011838 , NM_011838.1 , NM_011838.2 , NM_011838.3 , NM_011838.4 , BC005771
UniProt ID:	P0DP60



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Summary:

Acts in different tissues through interaction to nicotinic acetylcholine receptors (nAChRs) (PubMed:10402197). The proposed role as modulator of nAChR activity seems to be dependent on the nAChR subtype and stoichiometry, and to involve an effect on nAChR trafficking and its cell surface expression, and on single channel properties of the nAChR inserted in the plasma membrane. Modulates functional properties of nicotinic acetylcholine receptors (nAChRs) to prevent excessive excitation, and hence neurodegeneration. Enhances desensitization by increasing both the rate and extent of desensitization of alpha-4:beta-2-containing nAChRs and slowing recovery from desensitization. Promotes large amplitude ACh-evoked currents through alpha-4:beta-2 nAChRs (PubMed:10402197, PubMed:11906696). Is involved in regulation of the nAChR pentameric assembly in the endoplasmic reticulum. Shifts stoichiometry from high sensitivity alpha-4(2):beta-2(3) to low sensitivity alpha-4(3):beta-2(2) nAChR (PubMed:25193667). In vitro modulates alpha-3:beta-4-containing nAChRs. Reduces cell surface expression of (alpha-3:beta-4)(2):beta-4 and (alpha-3:beta-4)(2):alpha-5 nAChRs suggesting an interaction with nAChR alpha-3(-):(+):beta-4 subunit interfaces and an allosteric mode. Corresponding single channel effects characterized by decreased unitary conductance, altered burst proportions and enhanced desensitization/inactivation seem to depend on nAChR alpha:alpha subunit interfaces and are greater in (alpha-3:beta-2)(2):alpha-3 when compared to (alpha-3:beta-2)(2):alpha-5 nAChRs (By similarity). Prevents plasticity in the primary visual cortex late in life (PubMed:21071629).[UniProtKB/Swiss-Prot Function]

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](#).

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).