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Product datasheet for TL511895

NGAL (Lcn2) Mouse shRNA Plasmid (Locus ID 16819)

Product data:

Product Type:	shRNA Plasmids
Product Name:	NGAL (Lcn2) Mouse shRNA Plasmid (Locus ID 16819)
Locus ID:	16819
Synonyms:	24p3; AW212229; NRL; Sip24
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	Lcn2 - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 16819). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	BC132069, BC132071, NM_008491, NM_008491.1, BC020275
UniProt ID:	P11672
Summary:	Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development (PubMed:12453413). Binds iron through association with 2,5-dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron from the cell, depending on the context. Iron-bound form (holo-24p3) is internalized following binding to the SLC22A17 (24p3R) receptor, leading to release of iron and subsequent increase of intracellular iron concentration. In contrast, association of the iron-free form (apo-24p3) with the SLC22A17 (24p3R) receptor is followed by association with an intracellular siderophore, iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration. Involved in apoptosis due to interleukin-3 (IL3) deprivation: iron-loaded form increases intracellular iron concentration without promoting apoptosis, while iron-free form decreases intracellular iron levels, inducing expression of the proapoptotic protein BCL2L11/BIM, resulting in apoptosis. Involved in innate immunity; limits bacterial proliferation by sequestering iron bound to microbial siderophores, such as enterobactin (PubMed:15531878, PubMed:16446425). Can also bind siderophores from M.tuberculosis (By similarity).[UniProtKB/Swiss-Prot Function]

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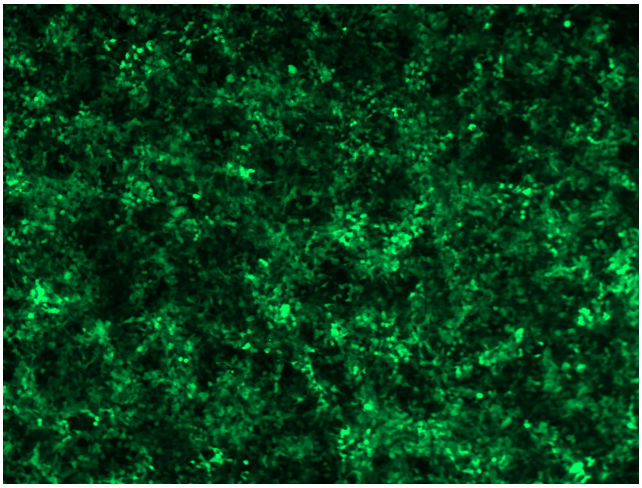
shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

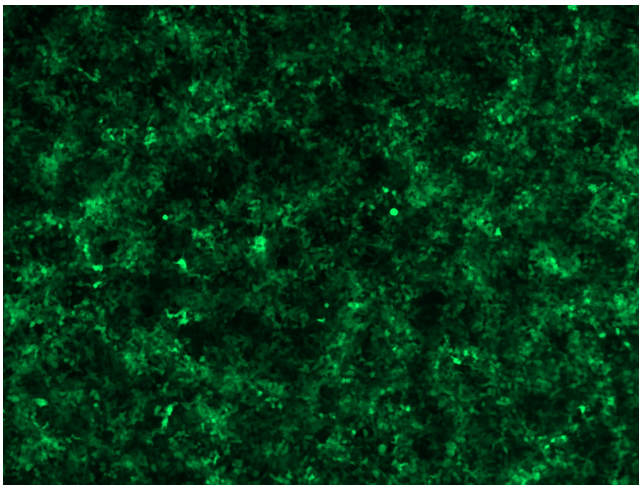
Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency 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).

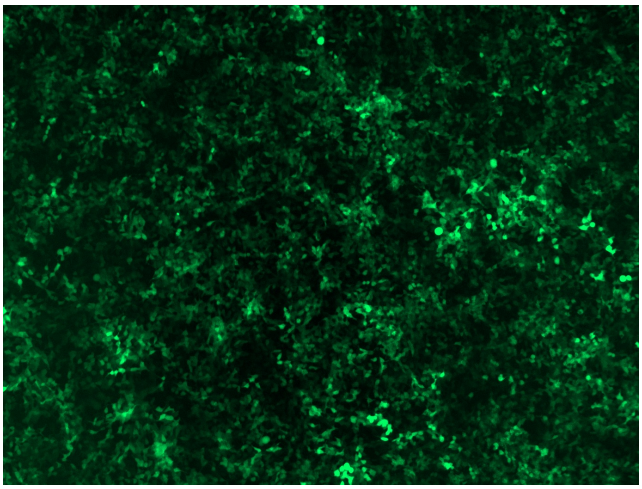
Product images:



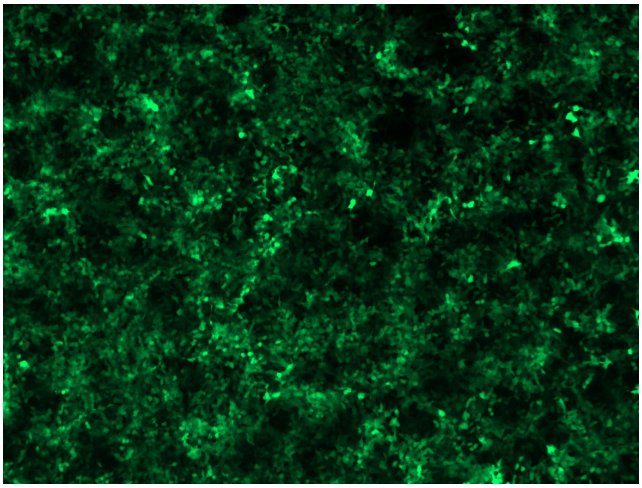
GFP signal was observed under microscope at 48 hours after transduction of TL511895A virus into HEK293 cells. TL511895A virus was prepared using lenti-shRNA TL511895A and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of TL511895B virus into HEK293 cells. TL511895B virus was prepared using lenti-shRNA TL511895B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL511895C] virus into HEK293 cells. [TL511895C] virus was prepared using lenti-shRNA [TL511895C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL511895D] virus into HEK293 cells. [TL511895D] virus was prepared using lenti-shRNA [TL511895D] and [TR30037] packaging kit.