Product datasheet for MR226236L4

Nr5a1 (NM_139051) Mouse Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nr5a1 (NM_139051) Mouse Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Nr5a1
Synonyms:	Ad4BP; ELP; ELP-3; Ftz-F1; Ftzf1; SF-1; SF1; STF-1
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(MR226236).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:

Sgf I   ORF   *Mlu I*

--- GCG ATC GC C ATG ---//--- NNŇ* ACG CGT ---

Kozak Consensus

EcoR I   *BamH I*   RBS   *Sgf I*   ORF

CTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGC C ATG --- --- ---

Mlu I   *Not I*   *Xho I*   mGFP Tag

--- --- --- --- --- --- NNŇ ACG CGT ACG CGG CCG CTC GAG ATG AGC GGG GGC --- --- --- ---
                        T   R   T   R   P   L   E   M   S   G   G   - - - -

--- --- GGA CTC AGA GTT TGG GTA GGA AGC
  -   -   G   L   R   V

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

ACCN:	NM_139051
ORF Size:	1389 bp

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OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.
	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. More info
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 Method:	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:	NM_139051.3, NP_620639.1
RefSeq Size:	2947 bp
RefSeq ORF:	1389 bp
Locus ID:	26423
UniProt ID:	P33242
Cytogenetics:	2 24.42 cM

Gene Summary:

Transcriptional activator. Seems to be essential for sexual differentiation and formation of the primary steroidogenic tissues. Binds to the Ad4 site found in the promoter region of steroidogenic P450 genes such as CYP11A, CYP11B and CYP21B. Also regulates the AMH/Muellerian inhibiting substance gene as well as the AHCH and STAR genes. 5'-YCAAGGYC-3' and 5'-RRAGGTCA-3' are the consensus sequences for the recognition by NR5A1. The SFPQ-NONO-NR5A1 complex binds to the CYP17 promoter and regulates basal and cAMP-dependent transcriptional activity (By similarity). Transcription repressor of the Moloney leukemia virus long terminal repeat in undifferentiated murine embryonal carcinoma cells. Binds phosphatidylcholine and phospholipids with a phosphatidylinositol (PI) headgroup, in particular phosphatidyl(3,4)bisphosphate, phosphatidyl(3,5)bisphosphate and phosphatidyl(3,4,5)triphosphate. Activated by the phosphorylation of NR5A1 by HIPK3 leading to increased steroidogenic gene expression upon cAMP signaling pathway stimulation. [UniProtKB/Swiss-Prot Function]

Product images:
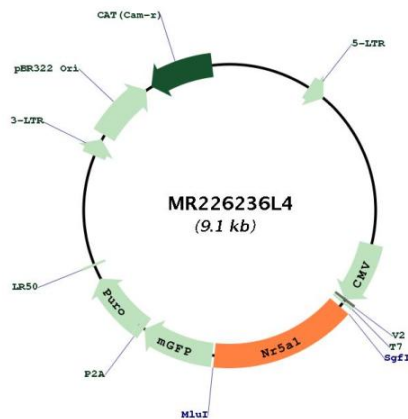
Circular map for MR226236L4
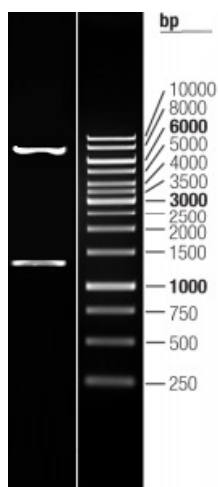
Double digestion of MR226236L4 using SgfI and MluI