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Product datasheet for MG222297

Nanos2 (NM_194064) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nanos2 (NM_194064) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Nanos2
Synonyms:	nos2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG222297 representing NM_194064
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGACCTACCGCCCTTTGACATGTGGAGAGACTACTTTAACCTGAGCCAGGTGGTGATGGATATAATTC
AGAGCCGGAAGCAAAGACAGGAGGGTGAGGTAGCTGAGGAGCCCAACTCCAGGCCCCAGGAGAAGAGTGA
GCAGGACCTGGAGGGCTACCCTGGATGTCTGCCTACCATATGCAACTTCTGCAAGCACAATGGGGAGTCT
CGTCACGTCTACACCTCACACCAGCTGAAGACGCCTGAAGGGGTGGTTGTGTGTCCCATCCTGAGGCACT
ATGTGTGTCCTCTATGTGGAGCCACCGGCGACCAGGCTCATACACTCAAGTATTGTCCACTCAACAGCAG
TCAGCAGTCTCTCTACCGACGCAGTGGGCGAAACTCAGCTGGTCGCAGAGTCAAGCGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222297 representing NM_194064
Red=Cloning site Green=Tags(s)

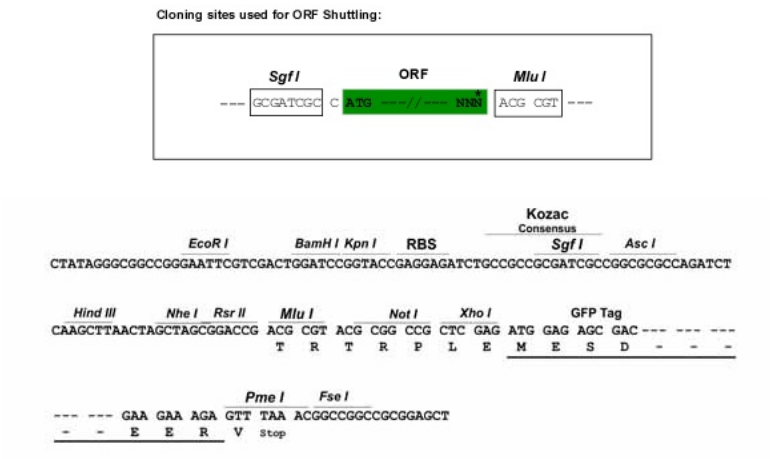
MDLPPFDMWRDYFNLSQVVMDIIQSRKQRQEGEVAEEPNSRPQEKSEQDLEGYPGCLPTICNFCKHNGES
RHVYTSHQLKTPEGVVVCPILRHYVCPLCGATGDQAHTLKYCPLNSSQQSLYRRSGRNSAGRRVKR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN:	NM_194064
ORF Size:	408 bp
OTI Disclaimer:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_194064.2, NP_918953.2
RefSeq Size:	1439 bp

RefSeq ORF: 411 bp

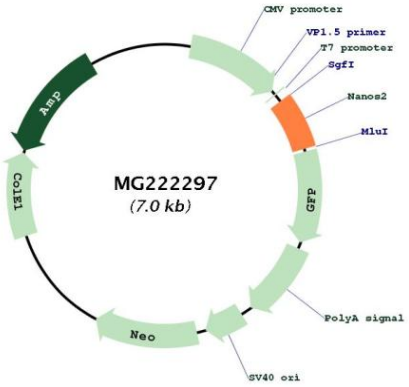
Locus ID: 378430

UniProt ID: P60322

Cytogenetics: 7 A3

Gene Summary: Plays a key role in the sexual differentiation of germ cells by promoting the male fate but suppressing the female fate. Represses the female fate pathways by suppressing meiosis, which in turn results in the promotion of the male fate. Maintains the suppression of meiosis by preventing STRA8 expression, which is required for premeiotic DNA replication, after CYP26B1 is decreased. Regulates the localization of the CCR4-NOT deadenylation complex to P-bodies and plays a role in recruiting the complex to trigger the degradation of mRNAs involved in meiosis. Required for the maintenance of the spermatogonial stem cell population. Not essential for the assembly of P-bodies but is required for the maintenance of their normal state.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG222297