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Product datasheet for RG232107

SIRT5 (NM_001242827) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIRT5 (NM_001242827) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SIRT5
Synonyms:	SIR2L5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG232107 representing NM_001242827
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGGAGCAAGGAGCCCAACGCCGGGCACCGCGCCATAGCCGAGTGTGAGACCCGGCTGGGCAAGCAGG
GCCGGCGAGTCGTGGTCATCACCCAGAACATCGATGAGCTGCACCGCAAGGCTGGCACCAAGAACCTTCT
GGAGATCCATGGTAGCTTATTTAAAACTCGATGTACCTCTTGTGGAGTTGTGGCTGAGAATTACAAGAGT
CCAATTTGTCCAGCTTTATCAGGAAAAGGTGCTCCAGAACCTGGAACTCAAGATGCCAGCATCCCAGTTG
AGAAACTTCCCCGGTGTGAAGAGGCAGGCTGCGGGGGCTTGCTGCGACCTCACGTCGTGTGGTTTGGAGA
AAACCTGGATCCTGCCATTCTGGAGGAGGTTGACAGAGAGCTCGCCCACTGTGATTTATGTCTAGTGGTG
GGCACTTCCTCTGTGGTGTACCCAGCAGCCATGTTTGCCCCCCAGGTGGCTGCCAGGGGCGTGCCAGTGG
CTGAATTTAACACGGAGACCACCCCAGCTACGAACAGATTCAGGTTTCATTTCCAGGGACCCTGTGGAAC
GACTCTTCCTGAAGCCCTTGCCTGTCATGAAAATGAAACTGTTTCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG232107 representing NM_001242827
Red=Cloning site Green=Tags(s)

MGSKEPNAGHRAIAECETRLGKQGRRVVVITQNIDELHRKAGTKNLLEIHGSLFKTRCTSCGVVAENYKS
PICPALSGKGAPEPGTQDASIPVEKLPRCEEAGCGGLLRPHVVWFGENLDPAILEEVDRELAHCDLCLVV
GTSSVVYPAAMFAPQVAARGVPVAEFNTETTPATNRFRFHFQGPCGTTLPEALACHENETVS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

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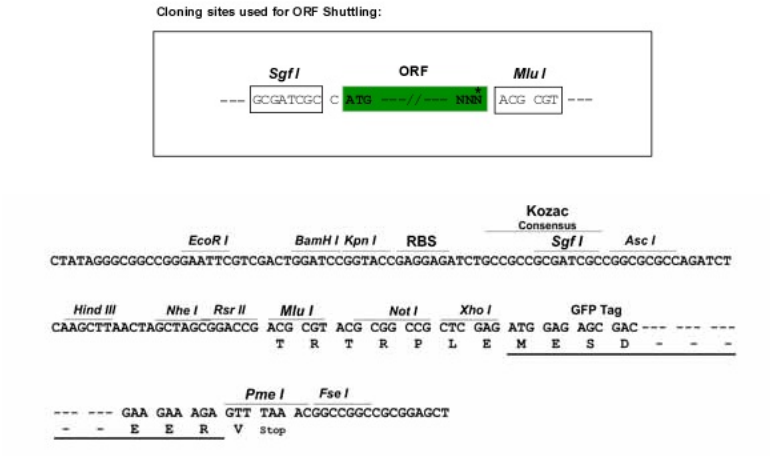
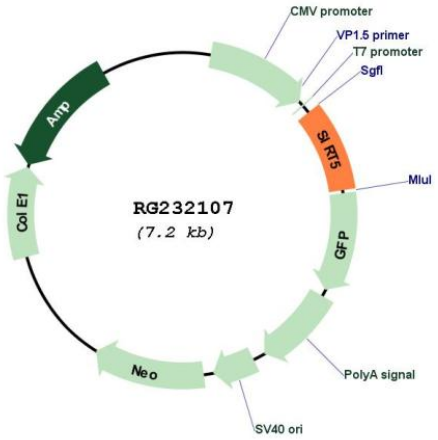
Cloning Scheme:



Plasmid Map:



ACCN:	NM_001242827
ORF Size:	606 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.

RefSeq: NM_001242827.1, NP_001229756.1

RefSeq Size: 4382 bp

RefSeq ORF: 609 bp

Locus ID: 23408

UniProt ID: Q9NXA8

Cytogenetics: 6p23

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: This gene encodes a member of the sirtuin family of proteins, homologs to the yeast Sir2 protein. Members of the sirtuin family are characterized by a sirtuin core domain and grouped into four classes. The functions of human sirtuins have not yet been determined; however, yeast sirtuin proteins are known to regulate epigenetic gene silencing and suppress recombination of rDNA. Studies suggest that the human sirtuins may function as intracellular regulatory proteins with mono-ADP-ribosyltransferase activity. The protein encoded by this gene is included in class III of the sirtuin family. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq, Jul 2010]