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Product datasheet for RC221409

SIRT5 (NM_031244) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIRT5 (NM_031244) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SIRT5
Synonyms:	SIR2L5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC221409 representing NM_031244
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGACCTCTCCAGATTGTCCCAAGTCGATTGATTTCCCAGCTATATTGTGGCCTGAAGCCTCCAGCGT
CCACACGAAACCAGATTTGCCTGAAAATGGCTCGGCCAAGTTCAAGTATGGCAGATTTTCGAAAGTTTTT
TGCAAAAGCAAAGCACATAGTCATCATCTCAGGAGCTGGTGTTAGTGCAGAAAGTGGTGTTCCGACCTTC
AGAGGAGCTGGAGGTTATTGGAGAAAATGGCAAGCCCAGGACCTGGCGACTCCCCTGGCCTTTGCCCACA
ACCCGTCCCGGGTGTGGGAGTTCTACCACTACCGGCGGGAGGTCATGGGGAGCAAGGAGCCCAACGCCGG
GCACCGCGCCATAGCCGAGTGTGAGACCCGGCTGGGCAAGCAGGGCCGGCGAGTCGTGGTCATCACCCAG
AACATCGATGAGCTGCACCGCAAGGCTGGCACCAAGAACCTTCTGGAGATCCATGGTAGCTTATTTAAAA
CTCGATGTACCTCTTGTGGAGTTGTGGCTGAGAATTACAAGAGTCCAATTTGTCCAGCTTTATCAGGAAA
AGGTGCTCCAGAACCTGGAACTCAAGATGCCAGCATCCCAGTTGAGAAACTTCCCCGGTGTGAAGAGGCA
GGCTGCGGGGGCTTGCTGCGACCTCACGTCGTGTGGTTTGGAGAAAACCTGGATCCTGCCATTCTGGAGG
AGGTTGACAGAGAGCTCGCCCACTGTGATTTATGTCTAGTGGTGGGCACTTCCTCTGTGGTGTACCCAGC
AGCCATGTTTGCCCCCCAGGTGGCTGCCAGGGGCGTGCCAGTGGCTGAATTTAACACGGAGACCACCCCA
GCTACGAACAGATTCAGTCATTTGATCTCCATCTCATCTCTAATTATTATAAAGAAT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC221409 representing NM_031244
Red=Cloning site Green=Tags(s)

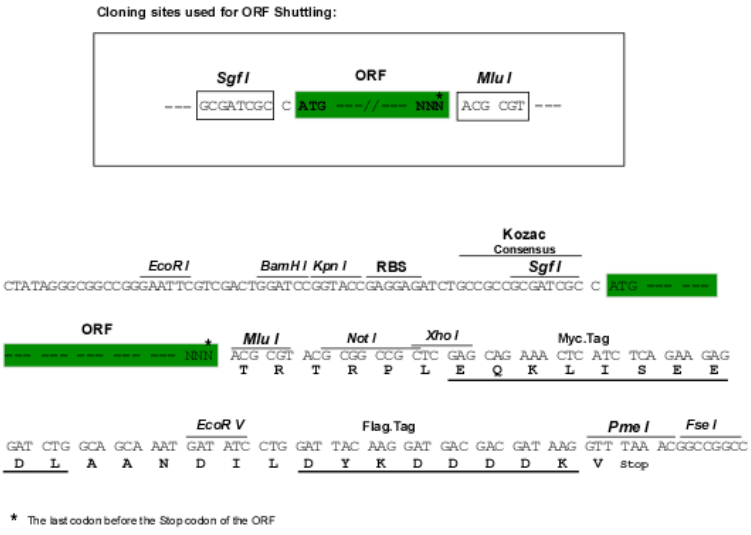
MRPLQIVPSRLISQLYCGLKPPASTRNQICLKMARPSSSMADFRKFFAKAKHIVIISGAGVSAESGVPTF
RGAGGYWRKWQAQDLATPLAFAHNPSRVWEFYHYRREVMGSKEPNAGHRAIAECETRLGKQGRRVVVITQ
NIDELHRKAGTKNLLEIHGSLFKTRCTSCGVVAENYKSPICPALSGKGAPEPGTQDASIPVEKLPRCEEA
GCGGLLRPHVVWFGENLDPAILEEVDRELAHCDLCLVVGTSSVVYPAAMFAPQVAARGVPVAEFNTETTP
ATNRFSHLISISSLIIIKN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8050_e10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_031244

ORF Size: 897 bp

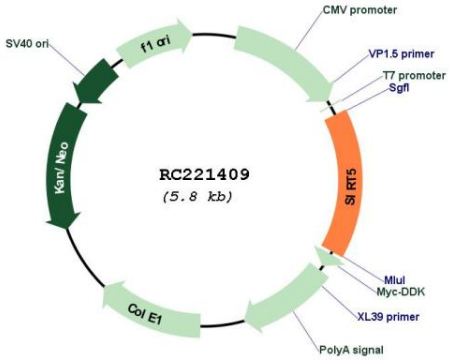
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

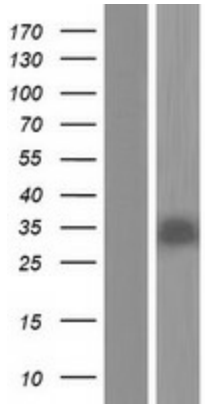
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_031244.3
RefSeq Size:	2350 bp
RefSeq ORF:	900 bp
Locus ID:	23408
UniProt ID:	Q9NXA8
Cytogenetics:	6p23
Domains:	SIR2
Protein Families:	Druggable Genome, Transcription Factors
MW:	32.5 kDa
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]

Product images:



Circular map for RC221409



Western blot validation of overexpression lysate (Cat# [LY410600]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221409 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).