

Product datasheet for RC208418

STING (TMEM173) (NM_198282) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	STING
Synonyms:	ERIS; hMITA; hSTING; MITA; MPYS; NET23; SAVI; STING; STING-beta; TMEM173
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208418 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCCCACTCCAGCCTGCATCCATCCATCCCGTGTCCAGGGGTACGGGGCCAGAAGGCAGCCTTGG
 TTCTGCTGAGTGCTGCTGGTGACCTTTGGGGGCTAGGAGAGCCACCAGAGCACACTCTCCGGTACCT
 GGTGCTCCACCTAGCCTCCCTGCAGCTGGGACTGCTGTTAAACGGGGTCTGCAGCCTGGCTGAGGAGCTG
 CGCCACATCCACTCCAGGTACCGGGCAGCTACTGGAGGACTGTGCGGGCCTGCCTGGGCTGCCCTCC
 GCCGTGGGGCCCTGTTGCTGCTGTCCATCTATTTCTACTACTCCCTCCAAATGCGGTGCGCCGCCCTT
 CACTTGGATGCTTGGCTCCTGGGCTCTCGCAGGCACTGAACATCCTCCTGGGCTCAAGGGCTGGCC
 CCAGCTGAGATCTCTGCAGTGTGTGAAAAAGGAATTTCAACGTGGCCCATGGGTGGCATGGTCAATT
 ACATCGGATATCTGCGGCTGATCCTGCCAGAGCTCCAGGCCCGGATTCGAACTTACAATCAGATTACAA
 CAACCTGCTACGGGGTGCAGTGAGCCAGCGGCTGTATTTCTCCTCCATTGGACTGTGGGTGCCTGAT
 AACCTGAGTATGGCTGACCCCAACATTCGCTTCTGGATAAACTGCCCCAGCAGACCGGTGACCATGCTG
 GCATCAAGGATCGGGTTTACAGCAACAGCATCTATGAGCTTCTGGAGAACGGGCAGCGGGCGGGCACCTG
 TGTCTGGAGTACGCCACCCCTTGCAGACTTTGTTTGCATGTCACAATACAGTCAAGCTGGCTTTAGC
 CGGGAGGATAGGCTTGAGCAGGCCAACTCTTCTGCCGACACTTGAGGACATCCTGGCAGATGCCCTG
 AGTCTCAGAACAAGTCCGCTCATTGCCTACCGGAACCTGCAGATGACAGCAGCTTCTCGCTGTCCCA
 GGAGGTTCTCCGGCACCTGCGGCAGGAGGAAAAGGAAGAGGTTACTGTGGGCAGCTTGAAGACCTCAGCG
 GTGCCAGTACCTCCAGCATGTCCCAAGAGCCTGAGCTCCTCATCAGTGAATGGAAGCCCTCCCTC
 TCCGCACGGATTCTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC208418 protein sequence
 Red=Cloning site Green=Tags(s)

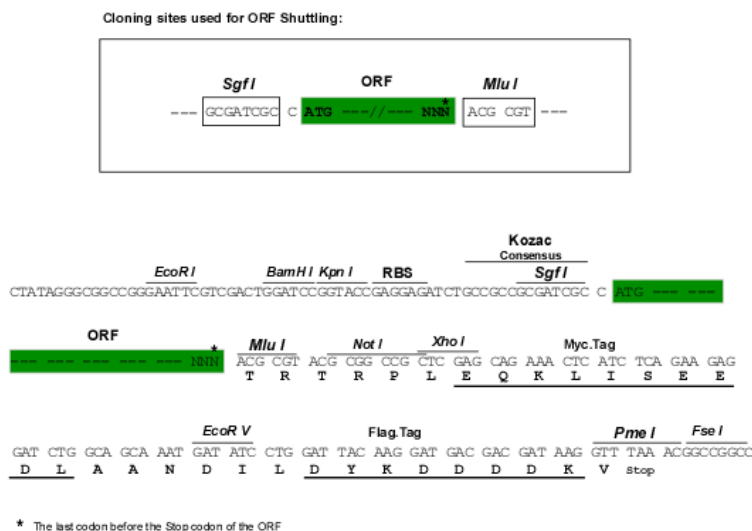
MPHSSLHPSIPCRGHGAQKAALVLLSACLVTWGLGEPPEHTLRYLVHLASLQLGLLLNGVCSLAEEL
 RHIHSRYRGSYWRTVRACLGCLRRGALLLSIYFYSLPNAVGPPFTWMLALLGLSQALNILLGLKGLA
 PAEISAVCEKGNFVAHGLAWSYYIGYLRILPELQARITYNQHYNNLLRGAVSQRLYILLPLDCGVPD
 NLSMADPNIRFLDKLPQQTGDHAGIKDRVYSNSIYELLENGQRAGTCVLEYATPLQTLFAMSQYSQAGFS
 REDRLEQAKLFCRTLEDILADAPESQNNCRLLIAYQEPADSSFSLSQEVLRHLRQEEKEEVTVGSLKTS
 VPSTSTMSQEPELLISGMEKPLPLRTDFS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6350_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_198282

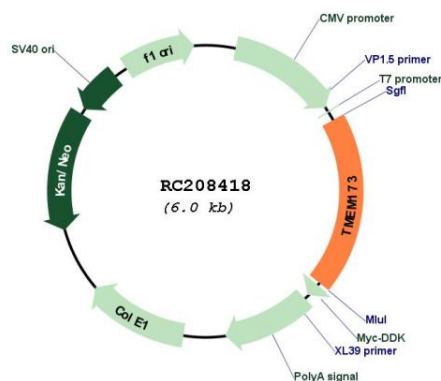
ORF Size: 1137 bp

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.

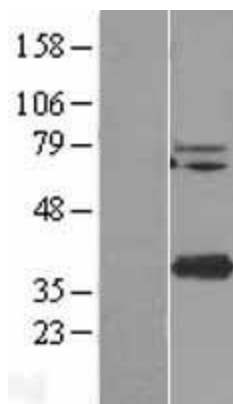
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none"> 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_198282.4
RefSeq Size:	2223 bp
RefSeq ORF:	1140 bp
Locus ID:	340061
UniProt ID:	Q86WV6
Cytogenetics:	5q31.2
Protein Pathways:	Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway
MW:	42.2 kDa
Gene Summary:	This gene encodes a five transmembrane protein that functions as a major regulator of the innate immune response to viral and bacterial infections. The encoded protein is a pattern recognition receptor that detects cytosolic nucleic acids and transmits signals that activate type I interferon responses. The encoded protein has also been shown to play a role in apoptotic signaling by associating with type II major histocompatibility complex. Mutations in this gene are the cause of infantile-onset STING-associated vasculopathy. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Sep 2014]

Product images:



Circular map for RC208418



Western blot validation of overexpression lysate (Cat# [LY405006]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208418 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TMEM173 protein (Cat# [TP308418]). The protein was produced from HEK293T cells transfected with TMEM173 cDNA clone (Cat# RC208418) using MegaTran 2.0 (Cat# [TT210002]).