

Product datasheet for **RC207136**

ST14 (NM_021978) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ST14 (NM_021978) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ST14
Synonyms:	ARCI11; CAP3; HAI; MT-SP1; MTSP1; PRSS14; SNC19; TADG15; TMPRSS14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC207136 representing NM_021978
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGAGCGATCGGGCCGCAAGGGCGGAGGGGGCCGAAGGACTTCGGCGCGGGACTCAAGTACAAC
 CCCGGCAGAGAAAAGTGAATGGCTTGGAGGAAGCGTGGAGTTCCCTGCCAGTCAACAACGTCAAGAAGGT
 GGAAAAGCATGGCCCGGGGCGCTGGGTGGTGTGGCAGCCGTGCTGATCGGCCTCCTCTTGGTCTTGCTG
 GGGATCGGCTTCTGGTGTGGCATTGTCAGTACCGGGACGTGCGTGTCCAGAAGGTCTTCAATGGCTACA
 TGAGGATCACAAATGAGAATTTTGTGGATGCCTACGAGAACTCCAATCCACTGAGTTTGAAGCTGGC
 CAGCAAGTGAAGGACGCGCTGAAGCTGCTGTACAGCGGAGTCCCATTCTGGGCCCTACCACAAGGAG
 TCGGCTGTGACGGCTTACGCGAGGGCAGCGTCATCGCCTACTACTGGTCTGAGTTCAGCATCCCGCAGC
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 CCTGAAGTCTTTGTGGTCACTCAGTGGTGGCTTTCCACGGACTCCAAAACAGTACAGAGGACCCAG
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 TGAGGCCACCTTCTTCCAGCTGCCTAGGATGAGCAGCTGTGGAGGCCGTTACGTAAGCCAGGGGACA
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ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207136 representing NM_021978
 Red=Cloning site Green=Tags(s)

MGSDRARKGGGGPKDFGAGLKYNSRHEKVNGLVEEFLPVNNVKKVEKHGPRWVLA AVLIGLLLVLL
 GIGFLVWHLQYRDVVRVQKVFNGYMRITNENFVDAYENSNSTEFVSLASKVKDALKLLYSGVPFLGPYHKE
 SAVTAFSEGSVIAYYWSEFSIPQHLVEEAERVMAEERVVMLPPRARSLSKSFVVTSVVAFPTDSKTQRTQ
 DNSCSFGLHARGVELMRF TTPGFPDSPYPAHARCQWALRGDADSVLSLTFRSFDLASC DERGSDLVTYYN
 T LSPMEPHALVQLCGTYPPSYNLTFHSSQNVLLITLITNTERRHPGFEATFFQLPRMSSCGRLRKAQGT
 FNSPYYPGHYPPIIDCTWNIEVPNNQHVKVRKFFYLLEPGVPAGTCKPKDYVEINGEKYCGERSQFVVT
 NSNKITVRFHSDQSYTDTGFLAEYLSYDSSDPCPGQFTCRTGRCIRKELRCDGWADCTDHSDELNCSCDA
 GHQFTCKNKFKPLFWCDSVND CGDNSDEQGCS CPAQTFRC SNGKCLSKSQQCNGKDDCGDGSDEASCP
 KVNVTCTKHTYRCLNGLCLSKGNPECDGKEDCS DGSDEKDCDCGLRSFTRQARVVGTDAD EGEWPWQV
 SLHALGQGHICGASLISPNWLVSAACHYIDDRGF RYSDPTQWTAFLGLHDQSQRSAPGVQERRLKR IISH
 PFFNDFTFDYDIALLELEKPAEYSSMVRP ICLPDASHVFPAGKAIWVTGWGHTQYGGT GALILQKGEIRV
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 RLPLFRDWIKENTGV

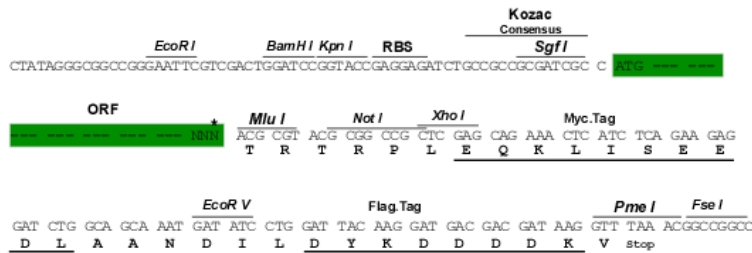
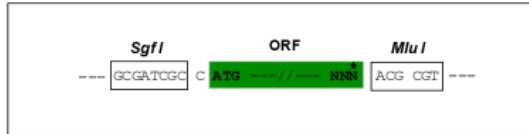
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3047_d01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

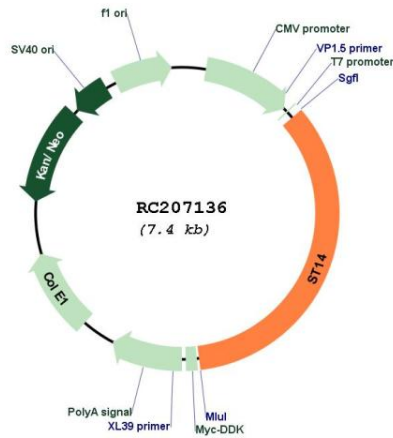


* The last codon before the Stop codon of the ORF

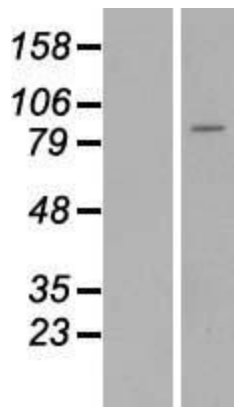
ACCN:	NM_021978
ORF Size:	2565 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid 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.</p> <p>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</p>
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_021978.4
RefSeq Size:	3319 bp
RefSeq ORF:	2568 bp
Locus ID:	6768
UniProt ID:	Q9Y5Y6
Cytogenetics:	11q24.3
Domains:	CUB, Tryp_SPC, ldl_recept_a
Protein Families:	Druggable Genome, Protease, Transmembrane
MW:	94.6 kDa

Gene Summary:

The protein encoded by this gene is an epithelial-derived, integral membrane serine protease. This protease forms a complex with the Kunitz-type serine protease inhibitor, HAI-1, and is found to be activated by sphingosine 1-phosphate. This protease has been shown to cleave and activate hepatocyte growth factor/scattering factor, and urokinase plasminogen activator, which suggest the function of this protease as an epithelial membrane activator for other proteases and latent growth factors. The expression of this protease has been associated with breast, colon, prostate, and ovarian tumors, which implicates its role in cancer invasion, and metastasis. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RC207136



Western blot validation of overexpression lysate (Cat# [LY411829]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207136 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).