

Product datasheet for RC205612

SERPINB4 (NM_002974) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SERPINB4 (NM_002974) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SERPINB4
Synonyms:	LEUPIN; PI11; SCCA-2; SCCA1; SCCA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC205612 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGAATTCAGTCAAGCCAAACCAAGTTCATGTTTCGATCTGTTCCAACAGTTCAGAAAAATCAAAG
 AGAACAACATCTTCTATCCCTATCAGCATCACATCAGCATTAGGGATGGTCTCTTAGGAGCCAAAGA
 CAACACTGCACAACAAATTAGCAAGTTCTTCACTTTGATCAAGTCACAGAGAACACCACAGAAAAAGCT
 GCAACATATCATGTTGATAGGTCAGGAAATGTTTCATCACCAGTTTCAAAGCTTCTGACTGAATTCAACA
 AATCCACTGATGCATATGAGCTGAAGATCGCCAACAAGCTCTTCGAGAAAAAGACGTATCAATTTTACA
 GGAATATTTAGATGCCATCAAGAAATTTACCAGACCAGTGTGGAATCTACTGATTTTGCAATGCTCCA
 GAAGAAAGTCGAAAGAAGATTAACCTCTGGGTGGAAGTCAAACGAATGAAAAATTAACCTATTTTC
 CTGATGGGACTATTGGCAATGATACGACTGGTCTTGTGAACGAATCTATTTCAAAGGGCAGTGGGA
 GAATAAATTTAAAAAGAAAACACTAAAGAGGAAAAATTTGGCCAAACAAGAATACATACAAATCTGTA
 CAGATGATGAGGCAATACAATTCCTTTAATTTGCCTTGCTGGAGGATGTACAGGCCAAGTCTGGAAA
 TACCATACAAAGGCAAGATCTAAGCATGATTGTGCTGCTGCCAATGAAATCGATGGTCTGCAGAAGCT
 TGAAGAGAACTCACTGCTGAGAAATGATGGAATGGACAAGTTTGAGAATATGAGAGAGACATGTGTC
 GATTTACACTTACCTCGTTCAAATGGAAGAGAGCTATGACCTCAAGGACACGTTGAGAACCATGGGAA
 TGGTGAATATCTTCAATGGGGATGCAGACCTCTCAGGCATGACCTGGAGCCACGGTCTCTCAGTATCTAA
 AGTCTACACAAGGCCTTTGTGGAGTCACTGAGGAGGAGTGGAAAGCTGCAGCTGCCACCCTGTAGTA
 GTAGTCGAATTATCATCTCCTTCACTAATGAAGATTCTGTTGTAATCACCTTTCTATTCTTCATAA
 GGCAAAATAAGACCAACAGCATCTCTTCTATGGCAGATTCTCATCCCCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC205612 protein sequence
 Red=Cloning site Green=Tags(s)

MNSLSEANTKFMFDLFQQFRKSKENNIFYSPISITSALGMVLLGAKDNTAQQISKVLHFDQVTENTTEKA
 ATYHVDRSGNVHHQFQKLLTEFNKSTDAYELKIANKLFGEKTYQFLQEYLDIAIKKFYQTSVESTDFANAP
 EESRKKINSWVESQTNEIKNLFDPGTIGNDTTLVLVNAIYFKGQWENKFKKENTKEEFWPNKNTYKSV
 QMMRQYNSFNFALLEVDQAKVLEIPYKGDLSMIVLLPNEIDGLQKLEELTAEKLMEWTSLQNMRETCV
 DLHLPRFKMEESYDLKDLRTMGMVNIFNGDADLSGMTWSHGLSVSKVLHKAFFEVEEGVEAAAATAVV
 VVELSSPSTNEEFCCNHPFLFFIRQNKNTSILFYGRFSSP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6437_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002974

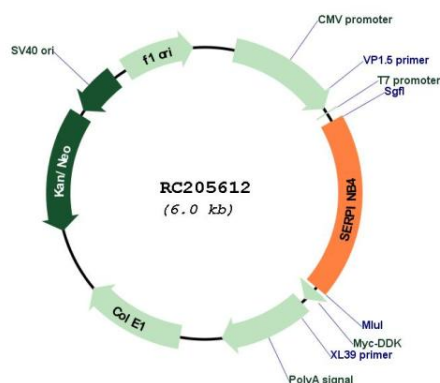
ORF Size: 1170 bp

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.

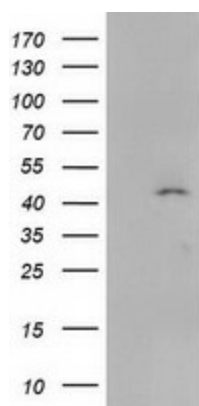
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<u>NM_002974.4</u>
RefSeq Size:	1787 bp
RefSeq ORF:	1173 bp
Locus ID:	6318
UniProt ID:	<u>P48594</u>
Cytogenetics:	18q21.33
Protein Families:	Druggable Genome, Secreted Protein
MW:	44.9 kDa
Gene Summary:	The protein encoded by this gene is a member of the serpin family of serine protease inhibitors. The encoded protein is highly expressed in many tumor cells and can inactivate granzyme M, an enzyme that kills tumor cells. This protein, along with serpin B3, can be processed into smaller fragments that aggregate to form an autoantigen in psoriasis, probably by causing chronic inflammation. [provided by RefSeq, Jan 2017]

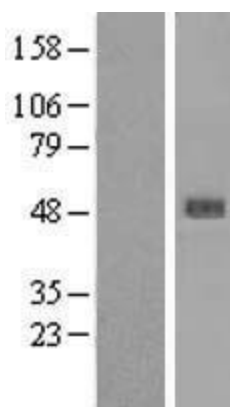
Product images:



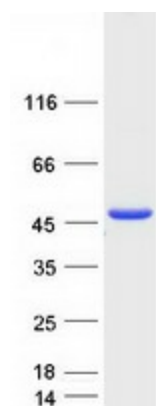
Circular map for RC205612



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SERPINB4 (Cat# RC205612, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SERPINB4 (Cat# [TA502386]). Positive lysates [LY418979] (100ug) and [LC418979] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY418979]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205612 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SERPINB4 protein (Cat# [TP305612]). The protein was produced from HEK293T cells transfected with SERPINB4 cDNA clone (Cat# RC205612) using MegaTran 2.0 (Cat# [TT210002]).