

Product datasheet for **RC238613**

SPATA18 (NM_001297608) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SPATA18 (NM_001297608) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SPATA18
Synonyms:	Mieap; SPETEX1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238613 representing NM_001297608
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGGAAAACCTGAAAAGACTGGTCTCAAACGAAACTTTACGAACGTTGCAGGAAAAGCTAGACTTCT
 GGCTGAAGGAGTACAACACAAACACGTGTGATCAAAATCTAAACCATTGCCTTGAACCTATTGAGCAAGT
 TGCCAAGGTGCAGGGACAACCTTTGGGATCCTCACAGCAGCAGCCCAAGAAGGAGGACGTAATGATGGT
 GTGAAAACAATCAAGTCACGCCTTTTGCCTTGGCTGGAGGCTTCTTTACTGCTGCTTCCCTGGGAAAAT
 CTGTTGACAGCAAGGTCCCCTCTCTGCAGGACACGTTTGTAGGGAGAGACATAAAGATCCCAGTCTCG
 GGATCGGGATATGCAACAGTTAGACTCTAATTTGAACTCAACCCGGAGTCAATGCAACCAGGTTCAAGAC
 GAGCTTAAATCTTTCAAGCTCAGGAGGATGCCCGCCACAGAAACACAGATCAGAGGAGCTCAGAGAATA
 GCGGTGACAGCCTTGGAGCTTGGAGGAGCGGAAGCGTGAGCAGTGAAGTCACTCAAGCAGAATGCAGA
 CCAGCAGGACACAGAAGCCATGTCGATTATAAGAAACAGCTCCGAAACCTGAAGGAGGAGATAGCTGTT
 CTGTCTGCTGAGAAAAGTGCCTCAAGGAAGTCCCTCCAGGAGCCGGTCTCCCAGCCCTGCCCTCGCA
 GCCGTAGCTGCAGCCGCAGCAGATCTGCCAGCCCTCCACCGCTGTCAAGGTGAGGAGACCGTCCCCAAA
 CCGCTCCAAGCTGTCAAATGTGGCGCGCAAGGCTGCCCTTGTCCCAGTTCAGCGATTCTATCCCAG
 GCCCGCTGGACGCGCAGTGCCTGCTGCGGCGTGCATCGACAAGGCTGAGACCGTTCAGCGGATCATCT
 ACATCGCCACAGTGGAGGCATCCATGTAGCAAAAATGGCATTGACACACTTCAAGATCCATGTGAGAAA
 ATCGTTGACACCATCTTATGTGGGTGCAATGACTTTGAGAATGCTGTCTTGGATTATGTCATTTGTCAT
 CTTGATCTATGATTCTCAAAGCAGTGTCAATGATGTGATCCGAGCCATGAATGTCAATCCCAAGATTT
 CATTCCCTCCTGCTGTTGACTTTTGCCTTCTCAGTGACTTCATCCAGGAGATATGTTGCCTTTTGC
 AATGCAGGCCTTAGAACACCCCTAGATATTGCATATGGAGCAGATGGAGAAGTTTTTAATGATTGCAAA
 TACCGCCGACGCTACGACTCGGATTTACTGCTCCCTTAGTCTCTATCACGTGTGGCCTGCTCTCATGG
 AGAATGACTGTGTCATTATGAAGGGAGAAGCTGTCAACAGGAGAGGGGCTTTTTTGAATTGCGTGCATC
 TGTAAGTCGTTGTGCAAGCAGGAGTTTAAAGTCCCATTGCCCCGTAGCCAAATTGGTTTAAACACGATG
 TCTCGAAGTCGGAGTCTTCTCCAATAAGATGTGGATTGCCAAGATTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238613 representing NM_001297608
 Red=Cloning site Green=Tags(s)

MAENLKRLVSNETLRTLQEKLDLFWLKEYNTNTCDQNLNHCLELIEQVAKVQGQLFGILTAAQEGGRNDG
 VETIKSRLLPWLEASFTAASLGKSVDSKVPSLQDTFDRERHKDPSPRDRMQQLDSNLNSTRSQCNQVQD
 ELKSLQAQEDARHRNTDQRSSNRSEPWSLEERKREQWNSLKQADQQDTEAMSDYKKQLRNLKEEIAV
 LSAEKSALQGRSSRSRSPAPRSRSCSRSPSTAVKVRPSPNRSKLSNVARKAALLSRFSDSYSQ
 ARLDAQLLRRCIDKAETVQRIIYIATVEAFHVAKMAFRHFKIHVRSKLSYVGSNDFENAVLDYVICH
 LDLYDSQSSVNDVIRAMNVNPKISFPPVDFCLLSDFIQEICCI AFAMQALEPPLDIAYGADGEVFNDC
 YRRSYDSDFTAPLVLYHVVPALMENDCVIMKGEAVTRRGAFWNSVRSRCSRSLSPICPRSQIGLNTM
 SRSRSPSPIRCGLPRF

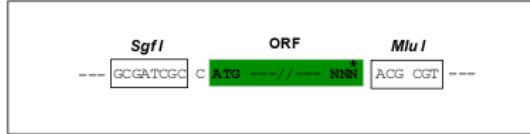
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

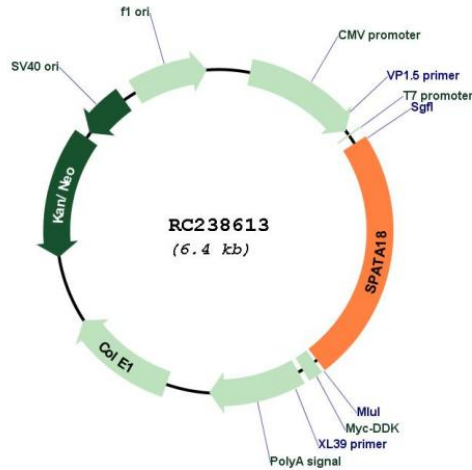
Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001297608

ORF Size: 1518 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_001297608.2](#)

RefSeq Size: 4329 bp

RefSeq ORF: 1521 bp

Locus ID: 132671

UniProt ID: [Q8TC71](#)

Cytogenetics: 4q12

MW: 57.9 kDa

Gene Summary: This gene encodes a p53-inducible protein that is able to induce lysosome-like organelles within mitochondria that eliminate oxidized mitochondrial proteins, thereby contributing to mitochondrial quality control. Dysregulation of mitochondrial quality control is associated with cancer and degenerative diseases. The encoded protein mediates accumulation of the lysosome-like mitochondrial organelles through interaction with B cell lymphoma 2 interacting protein 3 and B cell lymphoma 2 interacting protein 3 like at the outer mitochondrial membrane, which allows translocation of lysosomal proteins to the mitochondrial matrix from the cytosol. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2016]