

Product datasheet for **MC218461**

Spata18 (NM_178387) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Spata18 (NM_178387) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Spata18
Synonyms:	1700067I02Rik
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC218461 representing NM_178387
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCAGAAAGCCTGAAGAAGCTGGCCAAAAGCGAATCTTTACAAGCACTGCAGGATAAAGTCACCTACT
 GGGTGAACGACTACAACCTCAAACCTCTGTGATCAAAATCTAAATTATTGCATCGAACTCATCGAACAAGT
 TGCTAAAGTGCAGGCACAGCTCTTTGGGATCCTCACAGTGACAGCCCAAGAAGGGGGAAAT AATGAAGGC
 GTGGAGACAATCAAGTGTGCGCTTTTGCCTTGTGTCAGACTTCCTTCAGTTCTGTAAACATGGGGAAAA
 CGGCTGAGTCTGAGATGTGTGCTACACAGGATTTCCAACCTAGAAGTAAAAACAGAGACAATTCTCCGGA
 TCAGGACCAACATCAATCAGACAATGAATCGTTCTCAGAGACTCAACCAACCCAGGTTCAAGACGATCTG
 GCTGAAAGTGGAAAGAGTCTTGAAGGAGCCAAGAACGGATCAACCATATCCCTCTGGCTGCAGAGGAGG
 AGATAAACAGCTAAAAAAGCAGCTCAAATCTCTCCAAGCTCAGGAGGACGCCGCCACAAAACCTCGGA
 GAACCGTCGCTCTGAGGCCCTTAAAAAGTGATCATCGATCAACCAACGAACCCAGGACCAACGGCCCAA
 GACGTGGTGTCCAACATATGAGAAACATCTGCAAAATCTGAAGGAAGAGATAGCTGTCTGTCTGCTGAGA
 AAAGTGGTCTCCAGGGGAGGTCTGCCAGGAGCCCATCTCCTAGCACAGGCACCCGCAGCCACCGTCGCGG
 CCGCAGCCGTAGCCACAGCCGCAGCCGCAGCCACAGCCGGTCCAATAGCCCTGCACCACAGTGGCCAAG
 ATCAGAAGCCCGTCCCCAAACCGTGCCAAAATGTCCAGCGTGGCTCGCAAAGCTGCTCTCCTGTCCCGAT
 TCAGCGACGCCTATCCCAGGCCGTCTGGATGCTCAGTGCTTGTGAGGCGTTGCATCGACAGGGCAGA
 GACGGTGCAGCGGATCATTTACATCGCCACAGTGGAGGCATTTTCATGTAGCTAAAATGGCATT CAGGCAT
 TTCAAGATCCGGGTGAGGAAGATGCTGACGCCATCGAACGTGGGATCTAATACTGACTTTGAGACCCGAG
 TCTCCGAATACATTGTTTGGCACCTGGACCTGTGACTCGCAAAGCAGTGTCAATGATGTGATCCGTGC
 CATGAACGTCAACCCCAAGATCTATCCCTCCTGAAGTTGACTTCTGCCTCCTCACTGACTTCATCCAG
 GAGATTTGCTGCATTGCTTTTGAATGCAGTCTTAGAGCCACCCTCGATATCGCATTCCGGGCAGATG
 GGGAAATCTTTAACGATTGCAAGTACCGCCGAGCTATGACTCGGACTTTACTGCTCCCTTGGTCTTTTA
 TCACGTGTGGCCTGCTCTCATGGAGAATGACTGTGTCATTATGAAGGGAGAAGCTGTACCAAAAGAGGG
 GCTTTTTGGAGTTCGGTGCAGCAGTAATGCGGTGCCGTAGCAGGAGCTTAAGCCCCATTTGCTCTCGTA
 ATCATTTTGAATAAGCACGGTATCTCGAAGTCAAGCCCTTCTCCAATAAGATGTACATTCGCAAGGTA
CTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM_178387

Insert Size: 1614 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_178387.3](#), [NP_848474.2](#)

RefSeq Size: 1949 bp

RefSeq ORF: 1614 bp

Locus ID: 73472

UniProt ID: [Q0P557](#)

Cytogenetics: 5 C3.3

Gene Summary: Key regulator of mitochondrial quality that mediates the repairing or degradation of unhealthy mitochondria in response to mitochondrial damage. Mediator of mitochondrial protein catabolic process (also named MALM) by mediating the degradation of damaged proteins inside mitochondria by promoting the accumulation in the mitochondrial matrix of hydrolases that are characteristic of the lysosomal lumen. Also involved in mitochondrion degradation of damaged mitochondria by promoting the formation of vacuole-like structures (named MIV), which engulf and degrade unhealthy mitochondria by accumulating lysosomes. May have a role in spermatogenesis, especially in cell differentiation from late elongate spermatids to mature spermatozoa (By similarity). The physical interaction of SPATA18/MIEAP, BNIP3 and BNIP3L/NIX at the mitochondrial outer membrane regulates the opening of a pore in the mitochondrial double membrane in order to mediate the translocation of lysosomal proteins from the cytoplasm to the mitochondrial matrix (By similarity).[UniProtKB/Swiss-Prot Function]