

Product datasheet for **MR230101**

Spata7 (NM_001289574) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Spata7 (NM_001289574) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Spata7
Synonyms:	A1661438; B230306G18Rik; HSD3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>MR230101 representing NM_001289574
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAGACCAATTCTAAGATGAATTCCAAGTCTTTGTAATTCTCTACAGAAGCCCTCAGGGGAACCAC
 AAGACCAGGATGTGTTTCATAGAAGAAATGACAAGATACCCATCATTTCAAAGTCACTCATCCCTTCTTC
 CGAGGGACTGCATCTAAGTCTGCCTGAATCAAGTAAGATGCTCATGAGTGGCACCAGAAGCATGCCAGC
 ACCTCTCCATCCAGACTCAGGCTGTGGGCATGGCTGCGACAGGCGCCCTCGGAGTGCCACCAGTTCC
 AGGTAGCCCTCGCAAGACCCCAAGTGGAGATCTGTTGGAAAAGCACTCTGACCTCTTCTCTAACAAGCA
 GTCGCCATTCACTCCACGAACCTTAAAAACAGAAGCAAAGTCTTCTGTACAGTACCGCTACTACACA
 CCTGCCAAAAGAAGAAAGGATTTTTAGATCAGCGGATGGAAGCTGAAACCCAACTGAATTAAGCAGCT
 TTAAGTCTGAGCTTGGGACAGCTGAGAAAACGAGCTCAAAGGACTCAGAAGTGAACATAAACAGGTACC
 TAATTACACGAGAAATGGTGTGAAGACAAAATAGCTCCTTTACCCTCACAGGACAAAACCTTAGCATGG
 GACAGTATTCAAGATGGGATTCTGCAGCAGTCTCAGAAAAGGGCATCCTGTAAGCTCTCCACAGATTTT
 CTCCAGACAGTAAAATCTACTCTGATGAAGAAGAGCTGCTGTACCTGAGTTTCATGGAAAATGTGACGGA
 TGAAATCTTGAACTTGGTTATTTTTCTAACAGTTTCTAGAGCGACTGTTTGAGCGACATATAAAGAAA
 AATAAACATCATTTGGAGGAGGGAAAGATGCGCTACCTGCTGCATGGGCTGAAGGTTGACTTAGGCTGCA
 TATCTGAGGAAGACCCAGCAAAGCAAAAACATTCAGAATGTTGAATCAACTTCATTTTCAAAGGCTCT
 GATTTCAAGAGAAAATGAGTTTGAAGTATGAAGAACAGTGAAGTCAACAGGTTCAATGACGAAACAGATA
 GAGGCCCTGGACATGCTGTCGGCTGTGCCAAGGACGAAAACAAGATGTTCTCTTACCAGGCGAATTTT
 TAATACCCGCCATAAAGTCAAGCATTAGAGGTTGTTATAATTCAACAGGTTCAATGACGAAACAGATA
 TGAAGCCTCACCTGGAATGAAAACAATCCAAGTGTTCGATAGTGAATAGACCAGGAAACCTCTGTG
 GATGTCATTGAAGGTGACAGTACTTTGAAAGGCTGAGACTTCCAGGAACTCTGTTGTCTGAGCACAT
 CACTGTCCCATCTGGTCCATCCCCAGCATCAATGGTGGCAGTAATCATGGTAAGGAATTATCGACTCT
 ACGAATCATGGGAATGAGCATTGAAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR230101 representing NM_001289574
 Red=Cloning site Green=Tags(s)

MQTNKMNKFFVNSLQKPSGEPQDQDVFIEEMTRYPSFSKSLIPSSSEGLHLSLPESSKMLMSGTQKHAS
 TSPSRHSGCGHGCDRRPRSAHQFQVALAKTPSGDLEKHSDFSNKQSPFTRPRLKTEAKSFLSQYRYT
 PAKRRKDFSDQRMEAETQTELSFNSSELGTAEKTSKDESEVNIQVNYTRNGAEDKIAPLPSQGNLAW
 DSIQDILQQSSERASCKLSTEFSPDSKIYSDEEELLYLSFMENVTDEILKLGFLSNRFLERLFRHIKK
 NKHHLEEGKMRYLLHGLKVDLGCISEEDPAKQKHFRMLNQLHFQKALISRENEFVSDEETVSHHERQQYQ
 EALDMLS AVPKDENKMFSLPGEFLIPAHKVKHSEGVIIQQVNDETDNEASPNWENNPSVSDSVIDQETSV
 DVIEGSDSDFERAETSRELCLSTSLSPSGPFPSPINGGSHGKELSTLRIMGMSIED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

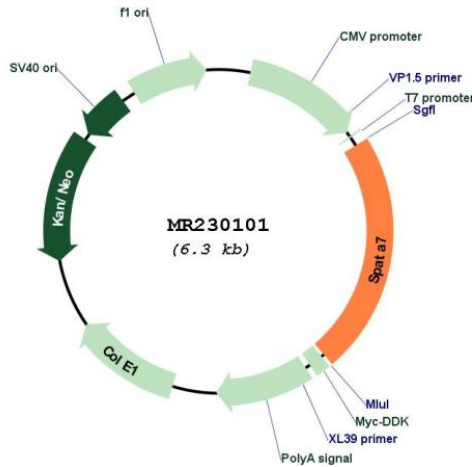
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289574

ORF Size: 1428 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_001289574.1](#), [NP_001276503.1](#)

RefSeq Size: 2137 bp

RefSeq ORF: 1431 bp

Locus ID: 104871

Cytogenetics: 12 E

MW: 54.2 kDa

Gene Summary: Involved in the maintenance of both rod and cone photoreceptor cells (PubMed:25398945, PubMed:29100828, PubMed:29899041). Required for photoreceptor-specific localization of proximal connecting cilium (CC) proteins RPGR, AHI1, NPHP1, NPHP4, and RPGRIP1 at the distal CC, a photoreceptor-specific extension of the primary cilium transition zone (PubMed:25398945, PubMed:29100828, PubMed:29899041). Maintenance of protein localization at the photoreceptor-specific distal CC is essential for normal microtubule stability and to prevent photoreceptor degeneration (PubMed:25398945, PubMed:29899041). [UniProtKB/Swiss-Prot Function]