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Product datasheet for MR211734

Spag5 (NM_017407) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Spag5 (NM_017407) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Spag5
Synonyms:	AI874642; D11Bhm180e; Deepest; MAP126; Mastrin; S17
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211734 representing NM_017407
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTGGAGGGTGAAAACACTGAATCTCGGTTTGTCGCCTTCGCCCCAAAAGGGGAAGCCAGCTATGAGTA
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CTGTCCCTAACACACGTGCAAGAAGGCAGAGTGACAGTGAGTCAGGAGTCTCAGCGGTCAAAAACCCTGG
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Protein Sequence:

>MR211734 representing NM_017407
Red=Cloning site Green=Tags(s)

MWRVKTLNLGLSPSPQKGKPAMSTPLRELKLQPEALADSGKGPSMISALTPYLCRLELKERCNNSSPVDF
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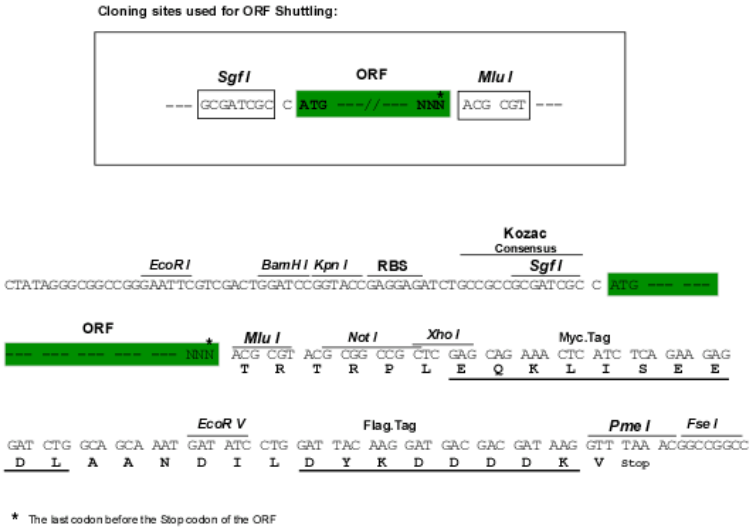
Chromatograms: https://cdn.origene.com/chromatograms/mm9047_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

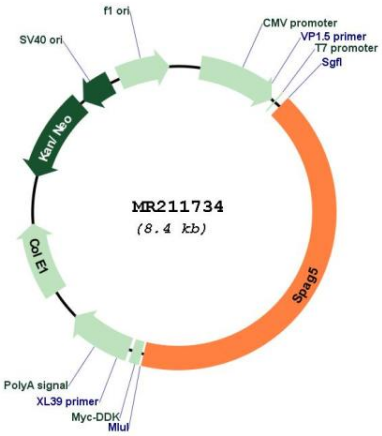


ACCN: NM_017407

ORF Size: 3495 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_017407.3
RefSeq Size:	3822 bp
RefSeq ORF:	3498 bp
Locus ID:	54141
UniProt ID:	Q7TME2
Cytogenetics:	11 46.74 cM
MW:	130.4 kDa
Gene Summary:	Essential component of the mitotic spindle required for normal chromosome segregation and progression into anaphase. Required for chromosome alignment, normal timing of sister chromatid segregation, and maintenance of spindle pole architecture. In complex with SKAP, promotes stable microtubule-kinetochore attachments. May contribute to the regulation of separase activity. May regulate AURKA localization to mitotic spindle, but not to centrosomes and CCNB1 localization to both mitotic spindle and centrosomes. Involved in centriole duplication. Required for CDK5RAP22, CEP152, WDR62 and CEP63 centrosomal localization and promotes the centrosomal localization of CDK2. In non-mitotic cells, upon stress induction, inhibits mammalian target of rapamycin complex 1 (mTORC1) association and recruits the mTORC1 component RPTOR to stress granules (SGs), thereby preventing mTORC1 hyperactivation-induced apoptosis. May enhance GSK3B-mediated phosphorylation of other substrates, such as MAPT/TAU (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR211734