

## Product datasheet for **MR216996**

### **Stra6 (NM\_001162476) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Stra6 (NM_001162476) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Stra6
Synonyms:	A1891933
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR216996 representing NM\_001162476  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGAGTCCCAGGCATCTGAGAATGGAAGCCAGACCTCCTCCGGGTGACAGATGACTACAGCAGCTGGT  
 ACATCGAGGAACCTCTAGGAGCTGAGGAGGTGCAGCCAGAGGGGGTATTCCCTTTGCCAGCTACCCGC  
 ACCCCCTGCCCTGCTCCATGCCTGCCTGGCTTCACTGTCGTTCTGGTTCTGCTGCTGGCCTTGCTG  
 GTGAGACGGCGCAGGCTTTGGCCACGCTGTGGTATCGCGGACTTGGACTGCCAGCCCTGTGGATTCT  
 TGGCTGGGACCTATCCTGGACAGTGCCTGCTGCTGTCTTTGGTCTCTTTCAGCAACCTATGCCTGTT  
 GCTCCCTGATGAGAACCCTGCCTTCTGAACCTCACTGCAGCATCAAGTCCAGATGGAGAGATGGAG  
 ACATCAAGAGGGCCCTGGAAGCTACTGGCTCTGCTCTACTATCCAGCCCTCTATTACCCTCTGGCTGCT  
 GTGCTTCGGCAGGCACCAAGCTGCATTCTATTGGGACTGTGTATCTTGGGCCACTTTGGTGTCA  
 GGTCTGGCAGAAAGCTGAGTGTCTCAGGATCCTAAGATCTACAAGCACTACTCCTTGTGTCCTCCCTG  
 CCTCTACTTCTGGGTCTTGGATTCTGAGCCTTTGGTATCCAGTACAACCTGTGCAGAGTCTCCGTACC  
 CGACAGGAGCAGGCTCCAGGGGCTGCAGACCAGCTACTCCGAGAAGTATCTGAGAACTTCTCTGCC  
 AAAGAAGTTGGATAGCTGCTCCCATCCTGCCTCCAAGCGTAGCCTCCTGTCTCGGGCCTGGGCCTTCTCC  
 CATCATTCCATCTACACTCCACAGCCAGGATCCGCCTGCCCTTGAAGCTGGTGTCTCGGCCACCCCTGA  
 CAGGAACAGCCACTTACCAGGTGGCCCTGCTGCTGCTGGTGGAGCGTGGTGCCTACTGTGCAGAAGGTGAG  
 GGCGGGGATCAACACAGATGTCTCCTACCTGCTGGCTGGCTTTGGGATCGTGTCTCTGAAGACAGGCAG  
 GAGGTGGTAGAGCTGGTGAAGCATCACCTATGGACTGTGGAAGCATGCTACATCTCAGCTCTGGTCTTGT  
 CCTCGCATCAACCTTCTGCTCCTGATCCGATCCCTGAGGACACACAGGGCCAATCTTCAAGCACTACA  
 CCGAGGGGCTGCCCTGGATCTGGACCCCTCTTTCAGAGTATTTCATCCCTCTCGCCAAGCCATAGTCAGC  
 TGGATGAGCTTCTGTGCCTACCAGACGGCCTTCACTGCTGCTTGGGCTCCTGGTGCAGCAGGTCATCTTCT  
 TCTTGGGGACCACATCCCTGGCCTTCTGGTGTGTTGTGCCTTACTGCATGGCAGGAACCTCCTGCTGCT  
 GCGATCCCTGGAATCCACGTGGCCCTTCTGGCTGACTGTGGCCTTAGCTGTAATCCTGCAGAACATAGCA  
 GCCAACTGGATCTTCTGAGGACTCACCATGGATACCCAGAGCTGACCAACCGGCGCATGCTCTGCGTAG  
 CTACTTTCTCCTTCCCCATCAACATGCTGGTGGGAGCCATAATGGCTGTCTGGCGGGTGTCTCATCTC  
 TTCTCTACAACACTGTTACCTCGGCCAGATGGACCTCAGCCTGCTGCCGAGAGGGCAGCCTCCCTG  
 GATCCAGGCTACCACACATACCAAACTTCTGAGGATTGAGGCCAGCCAGTACATCCAGGAGTCATAG  
 CCTTCTGTGCCCTGCTCCTCCATGCTCCAAGTCCACAGCCCCGGCCCCATTGGCCCCCTCAGGACAGCCT  
 CAGGCCGCGAGAAGAAGAAGAAGGGATGCAGTTGCTACAGACCAAGGACCTGATGGCCAAGGGAGCAGGA  
 CACAAAGGCAGCCAGAGCAGGGCCCGCTGGGGTCTGGCCTACACATTGCTCCACAATCCAAGCCTACAGG  
 CCTTCCGAAGGCAGCCCTTACTAGTGCCAAGGCAATGGCACCCAGCCC

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR216996 representing NM\_001162476  
Red=Cloning site Green=Tags(s)

```
MESQASENGSQTSSGVTDDYSSWYIEEPLGAEVQPEGVIPLCQLTAPPALLHACLASLSFLVLLLLALL
VRRRRLWPRCGHRGLGLPSPVDFLAGDLSWTVPAAVFVVLFSNLCLLLPDENPLPFLNLTAASSPDGEME
TSRGPWKLLALLYYPALYYPLAACASAGHQAFLGLTGLSWAHFGVQVWQKAACPDPKIKHYSLLASL
PLLLGLGFLSLWYPVQLVQSLRHPTGAGSQGLQTSYSEKYLRTLLCPKKLDSCSHPASKRSLLSRAWAFS
HHSIYTPQPGRFLPLKLVISATLTGTATYQVALLLLVSVVPTVQKVRAGINTDVSYLLAGFGIVLSEDRQ
EVVELVKHHLWTVEACYISALVLSCASTFLLLIRSLRTHRANLQALHRGAALDLPPLQSIHPSRQAIVS
WMSFCAYQTAFSCLGLLVQQVIFFLGTTSLAFLVFVPLLHGRNLLLLRSLESTWPFWLTVALAVILQNIA
ANWIFLRTHHGPELTNRRMLCVATFLLFPINMLVGAIMAVWRVLISLNTVHLGQMDLSLLPQRAASL
DPGYHTYQNFLRIEASQSHPGVIAFCALLLHAPSPQPRPPLAPQDSL RPAEEEEGMQLLQTKDLMAKGAG
HKGSQSRARWGLAYTLLHNPSLQAFRKAALTSKANGTQP
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_001162476

**ORF Size:** 2010 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\\_001162476.1](#), [NP\\_001155948.1](#)

**RefSeq Size:** 3095 bp

**RefSeq ORF:** 2013 bp

**Locus ID:** 20897

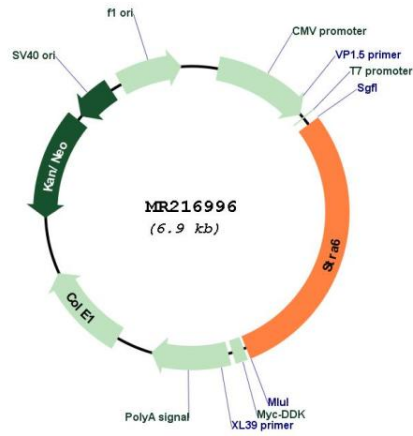
**UniProt ID:** [O70491](#)

**Cytogenetics:** 9 B

**MW:** 73.7 kDa

**Gene Summary:** Functions as retinol transporter (PubMed:23839944, PubMed:24852372). Accepts all-trans retinol from the extracellular retinol-binding protein RBP4, facilitates retinol transport across the cell membrane, and then transfers retinol to the cytoplasmic retinol-binding protein RBP1. Retinol uptake is enhanced by LRAT, an enzyme that converts retinol to all-trans retinyl esters, the storage forms of vitamin A (By similarity). Contributes to the activation of a signaling cascade that depends on retinol transport and LRAT-dependent generation of retinol metabolites that then trigger activation of JAK2 and its target STAT5, and ultimately increase the expression of SOCS3 and inhibit cellular responses to insulin (PubMed:21368206, PubMed:23839944). Important for the homeostasis of vitamin A and its derivatives, such as retinoic acid and 11-cis-retinal (PubMed:22467576, PubMed:24852372). STRA6-mediated transport is particularly important in the eye, and under conditions of dietary vitamin A deficiency (PubMed:22467576, PubMed:23839944, PubMed:24852372). Does not transport retinoic acid (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR216996