

## Product datasheet for MR229682

### Spn (NM\_009259) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Spn (NM_009259) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Spn
Synonyms:	A630014B01Rik; Cd43; Galgp; Ly-48; Ly48
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR229682 representing NM_009259 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTTGCACCTTCTCCTCCTCTTTGGGGCATGCTGGGTCCAGGTGGCGAGCCAGACAGTCTGCAGA  
GGACGACGATGCTACCATCTACCCACATATCACAGCTCCAAGTACCTCTGAAGCCAGAATGCCAGCCC  
ATCAGTTTCTGTGGGTGAGGGACAGTGGACTCGAAGGAGACCATCAGCCCTGGGGCAGACCACAATC  
CCAGTTTCTTTGACCCCTTGGAACTACTGAATTGTCTTTGGAGACTTCTGCTGGTCCAGCATGA  
GCACCCCTGTACCTGAGCCTACTGCCTCTCAGGAAGTTTCCAGCAAGACATCAGCACTGCTCCAGAACC  
ATCAAATGTAGCCAGTGACCCTCCTGTCAGTGCAGCCAACTCCTGTGACAGACGGACTGCAGCCAACTCT  
GTGACAGACGGAAGTGCAGCATCTACATCTATCTCTAAAGGAACCAAGTGCACCCCACTGTGACAA  
CAAGCTCTAACGAGACCAGTGGACCCTCTGTGGCTACAACAGTAAGTCCAAGACCAGTGGTCCCTGT  
CACCACAGCTACTGGGTCTCTGGGGCCCTCGAGTGAGATGCATGGACTCCCTGCTACCACAGCAACCAGT  
TCTGTGGAGAGTTCAGTGTGGCCCGTGGCACCTCAGTTTCCAGCAGAAAAACATCCACGACGTCTACCC  
AAGATCCCATAACCACCAGGTACCAAGCCAAGAATCAAGTGGCATGTTACTGGTGGCCATGCTTATTGC  
CTTGGTGGTGGTTTTGGCCCTCGTGGCGCTACTGCTGTGTGGCGCCAGAGGCAAAAGCGGAGGACTGG  
GCCCTGACCCTGAGCGGAGGAGAAACGAAATGGGGTGGTGGATGCCTGGGCTGGGCCAGCCGGGTTCC  
CTGATGAAGAGGCCACAACCACATCAGGGGCAGGGGCAACAAGGCTCTGAGGTACTGGAGACAGAAGG  
CTCCGGGCAGAGACCCACGCTCACTACGTTCTTACGACAGCGGAAGTCTCGCCAGGGCTCTTTAGTACTA  
GAAGAGCTGAAGCCTGGGTGGGTCCCAACCTGAAGGGGAGGAAGAGCCGCTTGTGGCAGTGAGGATG  
AAGCTGTGAAACCCCAACTTCTGACGTTCCACAAGCCAAAGATGAGGCCGACCTCAATCTCTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR229682 representing NM\_009259  
 Red=Cloning site Green=Tags(s)

MALHLLLLFGACWVQVAPDSLQRTTMLPSTPHITAPSTSEAQNASPSVSVGSGTVDSKETISPWGQTTI  
 PVSLTPLETTESSLETSAGASMSTPVPEPTASQEVSSKTSALLPEPSNVASDPPVTAANPVTDGPAANP  
 VTDGTAASTSISKGTSAPPTTVTTSSNETSGPSVATTVSSKTSGPPVTTATGSLGPSSEMHGLPATTATS  
 SVESSSVARGTSVSSRKTSTTSTQDPITTRSPSQESSGMLLVPMLIALVVLALVALLLWRQRKRRRTG  
 ALTLGGGKRNQVVDWAGPARVPDEEATTTSGAGGNKGSEVLETEGSGQRPTLTFFFRRKSRQGSLLV  
 EELKPGSGPNLKGEEEPLVGSDEAVETPTSDGPQAKDEAAPQSL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_009259

**ORF Size:** 1185 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\\_009259.5](#), [NP\\_033285.1](#)

**RefSeq Size:** 3751 bp

**RefSeq ORF:** 1188 bp

**Locus ID:** 20737

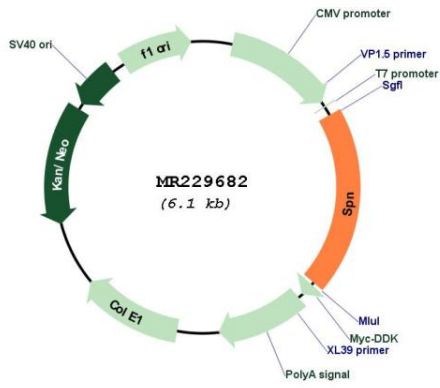
**UniProt ID:** [P15702](#)

**Cytogenetics:** 7 69.35 cM

**MW:** 40 kDa

**Gene Summary:** Predominant cell surface sialoprotein of leukocytes which regulates multiple T-cell functions, including T-cell activation, proliferation, differentiation, trafficking and migration. Positively regulates T-cell trafficking to lymph-nodes via its association with ERM proteins (EZR, RDX and MSN) (PubMed:17638845, PubMed:21289089, PubMed:11728336). Negatively regulates Th2 cell differentiation and predisposes the differentiation of T-cells towards a Th1 lineage commitment (PubMed:18490738). Promotes the expression of IFN-gamma by T-cells during T-cell receptor (TCR) activation of naive cells and induces the expression of IFN-gamma by CD4(+) T-cells and to a lesser extent by CD8(+) T-cells. Plays a role in preparing T-cells for cytokine sensing and differentiation into effector cells by inducing the expression of cytokine receptors IFNGR and IL4R, promoting IFNGR and IL4R signaling and by mediating the clustering of IFNGR with TCR (By similarity). Acts as a major E-selectin ligand responsible for Th17 cell rolling on activated vasculature and recruitment during inflammation. Mediates Th17 cells, but not Th1 cells, adhesion to E-selectin (PubMed:26700769). Acts as a T-cell counter-receptor for SIGLEC1 (PubMed:11238599).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR229682