

## Product datasheet for **RG220714**

### SPRED1 (NM\_152594) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SPRED1 (NM_152594) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SPRED1
Synonyms:	hSpred1; LGSS; NFLS; PPP1R147; spred-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG220714 representing NM\_152594  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGCGAGGAGACGGCGACTTCTGACAACGATAATAGTTATGCACGAGTGCGAGCTGTGGTGATGACCC  
 GAGATGACTCAAGTGGTGGATGGTTACCACTTGGAGGGAGTGGACTAAGCAGCGTCACTGTCTTCAAAGT  
 CCCTCATCAGGAAGAGAATGGCTGTGCTGACTTTTTTATCCGTGGAGAGCGACTCAGGGACAAAATGGTG  
 GTTTTGGAAATGTATGCTTAAAAAGACCTCATTATAATAAGGTCACTCCAACATTTACCACTGGAAGA  
 TTGATGACAAAAAGTTTGGTCTTACGTTTCAAAGTCTGCTGATGCTAGGGCTTTTATAGAGGTATCCG  
 AAGAGCTATAGAGGATATTTCTCAAGGATGCCCGAATCAAAAAATGAAGCTGAAGGGGCAGATGACTTA  
 CAAGCAATGAAGAGGATTTCCAGTTCTCTAGTGAAGGATCACCTTTTTTCCAGCAAGAGACAGTTGTTA  
 CCAGTGAGCCTTATAGAAGCTCAATATAAGACCTTCTCCCTTTGAAGATCTGAATGCCAGAAGAGTCTA  
 CATGCAAAGCCAAGCCAATCAGATAACATTTGGTCAGCCAGGCTTGGACATTCAGAGCAGAAGTATGGAA  
 TACGTACAGCGGCAAAATATCCAAGGAATGTGGAAGCCTAAAGTCCAAAAATAGGGTCCCTTTGAAATCAA  
 TCAGACATGTCAGCTTCAAGATGAGGATGAGATTGTCAGAATAAACCCCTCGAGATATCTTAATACGTCCG  
 CTATGCAGACTACAGACATCCTGACATGTGAAAAATGACTTGGAAAGAGATGATGCTGATTCCAGTATT  
 CAGTTTTCTAAACCAGACAGTAAAAATCAGACTATCTGTACTCTTGTGGGGATGAGACTAAGTTAAGTT  
 CACCCAAAGACTCTGTGGTATTTAAGACGCAGCCTTCCCTATTAATAAAGAGTCAAAACGAAGAAA  
 AGAGGATGGTGAACGTTCTCGTGCATATACTGCCAGGAAAGGTTAATCATGAAGAAAAATGTCAGGGGA  
 AAATGTCAGGATGCTCCAGACCCTATTAAGATGCATATATCAAGTTAGTTGCATGCTCTGTGCAGAGA  
 GCATGTTGTATCATTGTATGTCAGACTCAGAGGGAGATTTTTCTGATCCCTGTTCTGTGACTAGCGA  
 CGACAAGTTCTGCTTGCATGGTTAGCCCTGGTAGCTTTGTCTTTCATTGTACCATGTATGTGCTGTAC  
 GTCCTTTGAGAATGTGCCATCGCTGTGGTGAGGCATGTGGTTGCTGTGGTGGGAAACATAAAGCTGCTG  
 A

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG220714 representing NM\_152594  
 Red=Cloning site Green=Tags(s)

MSEETATSDNDNSYARVRVVMTRDDSSGGWLP LGGSGLSSVTVFKVPHQEENGCADFFIRGERLRDKMV  
 VLECMKKDLIYNKVPTFHHWKIDDKKFLTFQSPADARAFDRGIRRAIEDISQGPESKNEAEGADDL  
 QANEEDSSSLVKDHLFQQETVVTSEPYRSSNIRSPFEDLNARRVYMQSQANQITFGQPGLDIQSRSM  
 YVQRQISKECGSLKSNRVPLKSI RHVSFQDEDEIVRINPRDILIRRYADYRHPDMWKNDLERDDADSSI  
 QFSKPDSSKSDYLYSCGDETKLSSPKDSVVFKTQPSSLIKKSRRKEDGERSRCVYQCERFNHEENVRG  
 KCQDAPDPIKRCIYQVSCMLCAESMLYHCMSDSEGDFSDPCSDTSDDKFCLRWLALVALSFIVPCMCCY  
 VPLRMCHRCEACGCCGKHAAG

**TR**TRPLE - GFP Tag - V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_152594

**ORF Size:** 1332 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\\_152594.1](#), [NP\\_689807.1](#)

**RefSeq Size:** 3816 bp

**RefSeq ORF:** 1335 bp

**Locus ID:** 161742

**UniProt ID:** [Q7Z699](#)

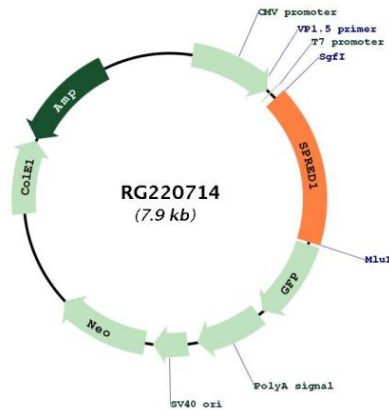
**Cytogenetics:** 15q14

**Domains:** WH1

**Protein Pathways:** Jak-STAT signaling pathway

**Gene Summary:** The protein encoded by this gene is a member of the Sprouty family of proteins and is phosphorylated by tyrosine kinase in response to several growth factors. The encoded protein can act as a homodimer or as a heterodimer with SPRED2 to regulate activation of the MAP kinase cascade. Defects in this gene are a cause of neurofibromatosis type 1-like syndrome (NFLS). [provided by RefSeq, Jul 2008]

**Product images:**



Circular map for RG220714