

Product datasheet for **RG223508**

SPTY2D1 (NM_194285) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SPTY2D1
Synonyms:	Spt2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG223508 representing NM_194285
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGACTTCAGAGAAATTCATGATAGCTTCCAAGGGACAAGGTGTCAACAATGTGCCGAAAAGGTATA
 GTTTGGCAGTGGGGCCTCCAAAAAAGACCCAAAAGTTAAAGGTGTCCAATCAGCAGCTGTACAAGCTTT
 TCTTAAAGGAAAGAGAGGAGCTGAGACGAAAAGCCTTAGAGGAGAAAAGGAGAAAAGAGGAAGTGTG
 AAAAGCGAATTGAGCTCAACATGACAAGAAAGCAAGAGCTATGGCCAAGAGGACAAGGATAATTTCC
 ATGGTTACAATGGGATTCTATTGAGGAAAAGTCAAAGAAGAGGCGAGCAACAGAAAAGCCATACCGCCA
 AGGAACCGACCGAGAGTATGAAATGGAAGAAGAGAATGAATTCCTCGAGTACAATCAGCGAGATCAGAG
 CAGGAGTATGAGGAAGAGCAAGAACCTCCCAAAGTTGAAAGCAAACCAAAGGTCCCCCTTAAAGTGCCC
 CACCACCCATGAATTCAGTATTTACTCAGGCTGGCTGAGAAAAAGCAGTTTGAACCAAGTGGAATCAA
 GGTAGTGAAGAAATCAGAAGAGCGACCTATGACCGCAGAAGAACTAGGGAGCGAGAATTCCTTGAACGA
 AAGCATAGGAGAAAAAACTTGAGACAGATGGAAGAACTACCTCAAAGTGTGTCCAAAAGGCACCTCTC
 AGAAAGAAAGTGTGGGCACAAAAGTTAGCAAGGTTCTGGAGACAGGCATCCTTCTTCCAAAGGAATGCC
 CCTTCTCATGCTGAGAAGAAATCAAGACCCAGCATGGCCAATGAGAAACACCTCGCTTTGTCTTCATCC
 AAATCCATGCCAGGAGAGAGGATCAAGGCAGGATCTGGCAATAGCTCCCAACCTCACTTCGTGAGGGCC
 ACGACAAAACCTGTTTTTAATGGAGCTGGAAGCCTCATTCCAGCACCTCTTACCAAGTGTCCCAAAGAC
 TTCTGCTAGCAGGACTCAGAAATCTGCTGTTGAGCACAAGCCAAAAATCTCTGTCCCATCTAGCCAT
 TCCAGGCTGGGCCATGGTCACCCACACAATAAGGCTAAGAGTCCAGGTGTCAGGCAGCCAGGCAGCA
 GCTCTAGCTCAGCCCTGGGCAGCCAGCACAGGGTGTCTGACCCACAGTTAGTTCTGGCCCTGTGCC
 TAGGGCCAGAAATGGCAGCTCCAGCTCAGGACCTGAGCGATCAATCAGTGGGTCCAAGAAGCCAACCAAT
 GACTCAATCCCTCTAGGCGGACAGTCAGTGGTACATGTGGCCTGGACAACCTGCAAGCAGCTCAGGTG
 GCCCTGGGCGACCCATCAGTGGTTCAAGTTCTGCAAGACCTTGGGCAGCTCTCGTGGCCCTGGCCG
 GCCTGTGAGCAGTCCACATGAATTCGACGACCAAGTGTGGCTTGGCCCCCGGGCGGTCTGTGAGT
 GGCCCTGGGAGATCCATAAGTGGCTCAATTCAGCTGGACGGAAGTGTGAGTAAATTCAGTCCAGGAAGAC
 CAGTGAGCAGCTTGGGACCTGGGCAACAGTTAGTAGCTCAGGTCCCACTATAAAGCCTAAGTGCAGTGT
 TGTCTCCGAAACAATTTCTTCAAGAATATCATTAGCCGGTCCAGCAATGGACAGATGAATGGAATGAAG
 CCTCCCCTATCTGGCTACAGAGCTGCCAAGGCTCTCAAAGGCTTCCCTCCCTACTGTTACAAAAGGC
 AGCGAGAAATGAAGAGGAAGATGACGATGATGATGAATACGACTCTGAAATGGAAGATTTTATTGAAGA
 TGAAGGAGAGCCTCAGGAAGAAATATCCAAGCACATTAGAGAAATCTTTGGTTATGACCGAAAAAATAC
 AAAGATGAAAGTGATTATGCCTTACGTTACATGGAAGTAGTTGGAAGAGCAGCAGAAGGAAGAAGCAA
 AGAGCTTAAGACTGGGTATGCAAGAGGACTTAGAGGAAATGAGACGTGAAGAAGAAGAAATGCAACGTCG
 AAGGGCCAAGAAGCTGAAGAGCGCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG223508 representing NM_194285
 Red=Cloning site Green=Tags(s)

MDFREILMIASKGQGVNVPKRYSLAVGPPKDKPKVKGVQSAAVQAF LKRKEELRRKALEEKRRKEELV
 KKRIELKHKKARAMAKRTKDNFHYNGIPIEEKSKKRQATESHTSQGTDREYEMEEENEFLYNHAASE
 QEYEEEQEPKVESKPKVPLKSAPPPMNFDTLLRLAEKKQFEPVEIKVVKKSEERPMTAEELREREFLE
 KHRRKKLETGKLPPTVSKKAPSQKESVGTSLKSGSGDRHPSKGMPLPHAEKKSRRPSMANEKHLALSSS
 KSMPPGERIKAGSGNSSQPSLREGHDKPVFNAGKPHSSTSSPSVPKTSASRTQKSAVEHKAKKSLSHPSH
 SRPGPMVTPHNKAKSPGVRQPGSSSSSAPGQSTGVARPTVSSGPVPRRQNGSSSSGPERISGSKKPTN
 DSNPSRRTVSGTCGPGQPASSSGGPRPISGSVSSARPLGSSRGPRPVSSPHELRRPVSGLGPPGRSVS
 GPGRSISGSIPAGRTVSNVSGRPVSSSLGPGQTVSSSGPTIKPKCTVVSETISSKNIISRSSNGQMNGMK
 PPLSGYRAAQGPQRLPFPTGYKRQREYEEEDDDDEYDSEMEDFIEDEGEPEEISKHIREIFGYDRKKY
 KDESALRYMESSWKEQQKEEAKSLRLGMQEDLEEMRREEEEMQRRRAKLLKRR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_194285

ORF Size: 2055 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_194285.3](#)

RefSeq Size: 5752 bp

RefSeq ORF: 2058 bp

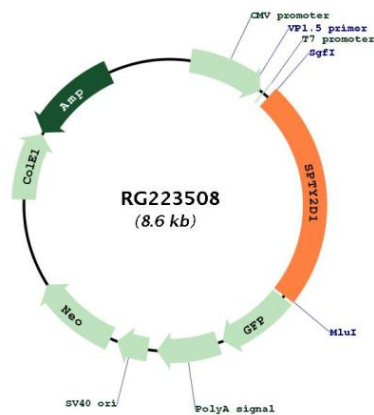
Locus ID: 144108

UniProt ID: [Q68D10](#)

Cytogenetics: 11p15.1

Gene Summary: Histone chaperone that stabilizes pre-existing histone tetramers and regulates replication-independent histone exchange on chromatin (PubMed:26109053). Required for normal chromatin refolding in the coding region of transcribed genes, and for the suppression of spurious transcription (PubMed:26109053). Binds DNA and histones and promotes nucleosome assembly (in vitro) (PubMed:23378026, PubMed:26109053). Facilitates formation of tetrameric histone complexes containing histone H3 and H4 (PubMed:26109053). Modulates RNA polymerase I-mediated transcription (By similarity). Binds DNA, with a preference for branched DNA species, such as Y-form DNA and Holliday junction DNA (PubMed:23378026). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG223508