

## Product datasheet for RC214440

### CTDSPL (NM\_005808) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CTDSPL (NM_005808) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CTDSPL
Synonyms:	C3orf8; HYA22; PSR1; RBSP3; SCP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214440 representing NM_005808 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGACGGCCCGCCATCATCACCCAGGTGACCAACCCCAAGGAGGACGAGGGCCGGTTGCCGGGCGCGG  
GCGAGAAAGCCTCCAGTGCAACGTCAGCTTAAGAAGCAGAGGAGCCGAGCATCCTTAGCTCCTTCTT  
CTGCTGCTCCGTGATTACAATGTGGAGGCCCTCCACCCAGCAGCCCCAGTGTGCTCCGCCACTGGT  
GAGGAGAATGGTGGCTCAGAAGCCACCAGCTAAGTACCTTCTCCAGAGGTGACGGTCTTGACTATG  
GAAAGAAATGTGTGGTCATTGATTTAGATGAAACATTGGTGCACAGTTCGTTAAGCCTATTAGTAATGC  
TGATTTTATTGTTCCGGTTGAAATCGATGGAACATACATCAGGTGTATGTGCTGAAGCGCCACATGTG  
GACGAGTTCCTCCAGAGGATGGGCGAGCTTTTGAATGTGTGCTCTTACTGCCAGCTTGCCCAAGTATG  
CAGACCTGTGGCTGACCTCCTAGACCGCTGGGTGTGTTCCGGGCCCGGCTCTTCAGAGAATCATGTGT  
TTTTCATCGTGGGAACTACGTGAAGGACCTGAGTCGCCTTGGGCGGGAGCTGAGCAAAGTATGATGTT  
GACAATCCCCTGCCTCATACATCTCCATCCTGAGAATGCAGTGCCTGTGCAGTCTGGTTCGATGACA  
TGACGGACACGGAGCTGCTGGACCTATCCCCTCTTTGAGGGCTGAGCCGGGAGGACGACGTGTACAG  
CATGCTGCACAGACTCTGCAATAGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC214440 representing NM\_005808  
Red=Cloning site Green=Tags(s)

MDGPAIITQVTNPKEDGRLPGAGEKASQCNVSLKKQRSRSILSSFFCCFRDYNVEAPPPSSPSVLPPLV  
 EENGGLQKPPAKYLLPEVTVLVDYGGKCVVIDLDELTVHSSFKPISNADFIVPVEIDGTIHQVYVLRPHV  
 DEFLQRMGQLFECVLFATSLAKYADPVADLLDRWGVFRARLFRESCVFRHGNVYKDL SRLGRELSKVIIIV  
 DNPSASYIFHPENAVPVQSWFDDMTDELLDLIPFFEGLSREDDVYSMLHRLCNR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6099\\_a04.zip](https://cdn.origene.com/chromatograms/mk6099_a04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_005808

**ORF Size:** 795 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\\_005808.3](#)

**RefSeq Size:** 4422 bp

**RefSeq ORF:** 798 bp

**Locus ID:** 10217

**UniProt ID:** [O15194](#)

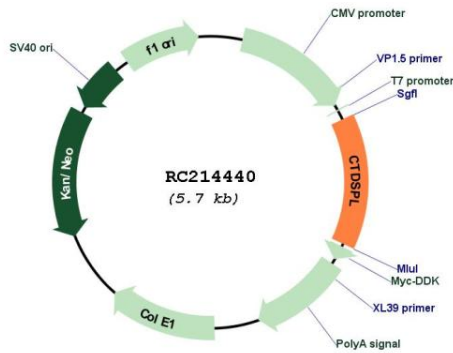
**Cytogenetics:** 3p22.2

**Protein Families:** Druggable Genome, Phosphatase

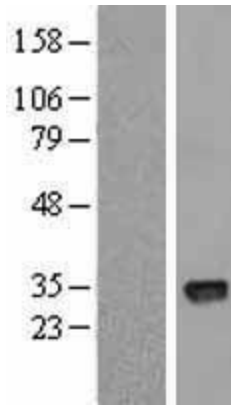
**MW:** 29.8 kDa

**Gene Summary:** Recruited by REST to neuronal genes that contain RE-1 elements, leading to neuronal gene silencing in non-neuronal cells (By similarity). Preferentially catalyzes the dephosphorylation of 'Ser-5' within the tandem 7 residue repeats in the C-terminal domain (CTD) of the largest RNA polymerase II subunit POLR2A. Negatively regulates RNA polymerase II transcription, possibly by controlling the transition from initiation/capping to processive transcript elongation.[UniProtKB/Swiss-Prot Function]

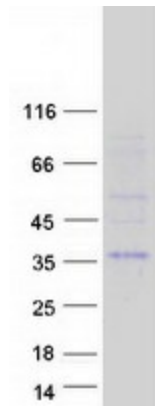
**Product images:**



Circular map for RC214440



Western blot validation of overexpression lysate (Cat# [LY401765]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214440 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CTDSPL protein (Cat# [TP314440]). The protein was produced from HEK293T cells transfected with CTDSPL cDNA clone (Cat# RC214440) using MegaTran 2.0 (Cat# [TT210002]).