

Product datasheet for RC209026

CTDSP2 (NM_005730) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | CTDSP2 (NM_005730) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | CTDSP2 |
| Synonyms: | OS4; PSR2; SCP2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC209026 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAACACGGCTCCATCATCACCCAGGCGGGAGGGAAGACGCCCTGGTGCTCACCAAGCAAGGCCTGG
TCTCCAAGTCCTCCTAAGAAGCCTCGTGGACGTAACATCTTCAAGGCCCTTTTCTGCTGTTTTCGCGC
CCAGCATGTTGGCCAGTCAAGTTCCTCCACTGAGCTCGCTGCGTATAAGGAGGAAGCAAACACCATTGCT
AAGTCGGATCTGCTCCAGTGTCTCCAGTACCAGTTCTACCAGATCCAGGGACCTGCCTGCTCCCAGAGG
TGACAGAGGAAGATCAAGGAAGGATCTGTGTGGTCATTGACCTCGATGAAACCCTTGTCATAGCTCCTT
TAAGCCAATCAACAATGCTGACTTCATAGTGCCTATAGAGATTGAGGGGACCACTCACCAGTGTATGTG
CTCAAGAGGCCTTATGTGGATGAGTTCCTGAGACGCATGGGGAACTCTTTGAATGTGTTCTCTTCACTG
CCAGCCTGGCCAAGTATGCCGACCCTGTGACAGACCTGCTGGACCGGTGTGGGGTGTCCGGGCCCGCCT
ATTCCTGAGTCTTGCGTGTCCACCAGGGCTGCTACGTCAAGGACCTCAGCCGCTGGGGAGGGACCTG
AGAAAGACCCTCATCCTGGACAACCTCGCCTGCTTCTTACATATCCACCCGAGAATGCAGTGCCTGTGC
AGTCTGGTTTGATGACATGGCAGACACTGAGTTGCTGAACCTGATCCCAATCTTTGAGGAGCTGAGCGG
AGCAGAGGACGTCTACACCAGCCTTGGGAGCTGCGGGCCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC209026 protein sequence
 Red=Cloning site Green=Tags(s)

MEHGSII TQARREDALV LTKQGLVSKSSPKKPRGRNIFKALFCCFRAQHV GQSSSSTELAA YKEEANTIA
 KSDLLQCLQYQFYQIPGTCLLPEVTEEDQGRICVVIDLDELTVHSSFKPINNADFI VPIEIEGTTHQVYV
 LKRPYVDEFLLRMGELFECVLF T ASLAKYADPVDLLDRCGVFRARLFR ESCV FHQGCYVKDL SRLGRDL
 RKTLILDNSPASYIFHPENAVPVQSWFDDMADTELLNL IPIFEELSGAEDVY TSLGQLRAP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6356_g03.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_005730

ORF Size: 813 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_005730.4](#)

RefSeq Size: 5038 bp

RefSeq ORF: 816 bp

Locus ID: 10106

UniProt ID: [O14595](#)

Cytogenetics: 12q14.1

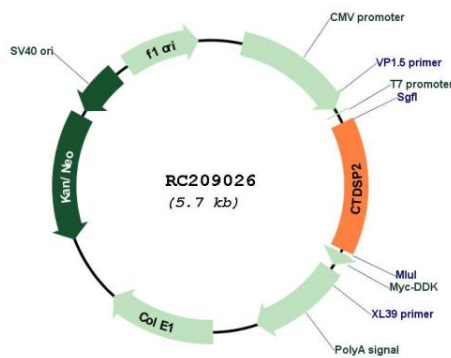
Domains: CPDc

Protein Families: Druggable Genome, Phosphatase

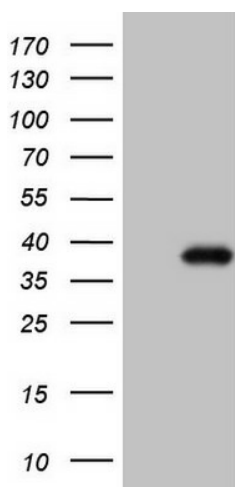
MW: 30.7 kDa

Gene Summary: 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. Recruited by REST to neuronal genes that contain RE-1 elements, leading to neuronal gene silencing in non-neuronal cells. May contribute to the development of sarcomas.[UniProtKB/Swiss-Prot Function]

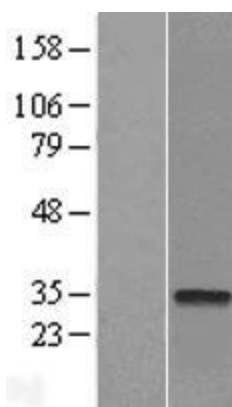
Product images:



Circular map for RC209026



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CTDSP2 (Cat# RC209026, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CTDSP2 (Cat# [TA808714])(1:2000). Positive lysates [LY417110] (100ug) and [LC417110] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417110]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209026 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).