

## Product datasheet for **RC215178**

### PSD95 (DLG4) (NM\_001365) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PSD95 (DLG4) (NM_001365) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PSD95
Synonyms:	MRD62; PSD95; SAP-90; SAP90
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC215178 representing NM\_001365  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCCAGAGACCAAGAGCTCCAGGTACGCCCTCTGGCTCCTGGCACCCCACTGCTGCGGTGGGCAC  
 CCCCACTCCTCACAGTGCATAGCGACTCTTCCAGGCCTTGCTGGACATCCTGGACTATTATGAGGC  
 TTCCCTCTCAGAGAGTCAGAAATACCGCTACCAAGATGAAGACACGCCCCCTCTGGAGCAGACGCCGGCC  
 CACCTCCCAACCAAGGCAATTCTCCCCAGTGATTGTCAACACAGATACCCTAGAAGCCCCAGGATATG  
 AGTTGCAGGTGAACGGGACCGAGGGGAGATGGAATACGAGGAAATCACATTGAAAGGGGTAACACTCAGG  
 TCTGGGCTTCAGCATCGCAGGTGGCACTGACAACCCACACATCGGTGACGACCCATCCATTTTCATCACC  
 AAGATCATTCTGGTGGGCTGCGGCCAGGATGGCCGCCTCAGGGTCAACGACAGCATCCTGTTGTAA  
 ATGAAGTGGACGTGCGCAGGTGACCCACTCAGCGCGGTGGAAGCCCTCAAAGAGGCAGGCTCCATCGT  
 TCGCCTCTATGTCATGCGCCGAAGCCCCGGCTGAGAAGTTCATGGAGATCAAGCTCATCAAGGGGCC  
 AAAGGTCTTGGCTTCAGCATCGCAGGGGGCTAGGGAACCAAGCAGCATCCCAAGGAGATAATAGCATCTATG  
 TAACAAAGATCATCGAAGGGGTGCTGCCACAAGGATGGGAGGTTGCAGATTGGAGACAAGATCCTGGC  
 GGTCAACAGTGTGGGCTAGAGGACGTCATGCATGAAGATGCTGTGGCAGCCCTGAAGAACCGTATGAT  
 GTTGTCTACCTAAAGGTGGCCAAGCCAGCAATGCCTACCTGAGTGACAGCTATGCTCCCCAGACATCA  
 CAACCTCTTATCCAGCACCTGGCAATGAGATCAGTCACAGCAGCTACCTGGGCACCGACTACCCAC  
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 CCCCAGAAACCGAGGCGAATTGTGATCCACCGGGCTCCACGGCCCTGGGCTTCAACATCGTGGGTGGCG  
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 GAAGGGGGACAGATCCTGTGGTCAACGGTGTGGACCTCCGAAATGCCAGCCATGAGCAGGCTGCCATT  
 GCCCTGAAGAATGCGGGTCAAGCGTACGATCATTGCTCAGTATAAACCAGAAGAGTACAGCCGATTTCG  
 AGGCCAAGATCCACGACCTTCGGGAACAGCTCATGAACAGCAGCCTGGGCTCAGGGACTGCGTCCCTGCG  
 GAGCAACCCAAAAGGGTTTCTACATCAGGGCCCTGTTTGATTACGACAAGACCAAGGACTGCGGCTTC  
 CTGAGCCAGGCCCTGAGCTTCCGCTTGGGGATGTGCTGCATGTCATCGATGCTAGTGATGAGGAGTGGT  
 GGCAGGCACGGCGGTCCACTCTGACAGTGAGACCGACGACATTGGGTTCCATCCCAGCAAACGGCGGGT  
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 GACTCGGTTCTGAGCTACGAGACAGTGACGAGATGGAAGTGCATATGCTCGCCCCATCATCATCCTTG  
 GGCCACCAAGGACCGCCCAACGATGATCTTCTCCGAGTTCGCCGACAAGTTTGGATCCTGTGTTC  
 CCATACGACACGGCCCAAGCGGGAGTATGAGATAGATGGCCGGGATTACCACTTTGTGTCGTCGCCGGAG  
 AAAATGGAGAAGGACATTCAGGGCACAAGTTCATTGAGGCCGGCCAGTACAACAGCCACCTCTATGGGA  
 CCAGCGTCCAGTCCGTGCGAGAGGTGGCAGAGCAGGGGAAGCACTGCATCCTCGATGCTCGGCCAATGC  
 CGTGGCGGGCTGCAGGGCGGCCACCTGCACCCATCGCCATCTTCATCCGCCCCGCTCCCTGGAGAAT  
 GTGCTAGAGATTAACAAGCGGATCACAGAGGAGCAAGCCGAAAGCCTTCGACAGAGCCACCAAGCTGG  
 AGCAGGAGTTCACAGAGTGTCTCAGCCATCGTGGAGGTGACAGCTTTGAGGAGATCTACCACAAGGT  
 GAAGCGTGCATCGAGGACCTCTCAGGCCCTACATCTGGGTTCCAGCCCGAGAGAGACTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC215178 representing NM\_001365  
Red=Cloning site Green=Tags(s)

MSQRPRAPRSALWLLAPLLRWAPLLTVLHSDLFQALLDILDYIEASLSESQKYRYQDEDTPPLEHSPA  
 HLPNQANSPPVIVNTDTLEAPGYELQVNGTEGEMEYEEITLERGNSGLGFSIAGGTDNPHIGDDPSIFIT  
 KIIPGGAAAQDGRRLRVNDSILFVNEVDVREVTHSAAVEALKEAGSIVRLVYMRKPPEAEKVMKIKGP  
 KGLGFSIAGGVGNQHIPGDNSIYVTKIIEGGAHKDGRLLQIGDKILAVNSVGLQEDVMHEDAVAALKNTYD  
 VVYLKVAKPSNAYLSDSYAPPDITTSYSQHLDNEISHSSYLGTDYPTAMTPTSPRRYSPVAKDLLGEEDI  
 PREPRRIVIHGSGTGLGFNIVGGEDGEGIFISFILAGGPADLSEGLRKGQILSVNGVDLRNASHEQAAI  
 ALKNAGQTVTIIAQYKPEEYSRFEAKIHDRLREQLMNSSLGSGTASLRSNPKRGFYIRALFDYDKTKDCGF  
 LSQALSFRRGVDLHVIDASDEEWQARRVHSDSETDDIGFIPSKRRVERREWSRLKAKDWGSSSGSQGRE  
 DSVLSYETVTQMEVHYARPIIILGPTKDRANDLLSEFPDKFGSCVPHTTRPKREYIDGRDYHFVSSRE  
 KMEKDIQAHKFI EAGQYNHLYGTSVQSVREVAEQGKHCILDVSNANVRRLLQAHLHPAIAFIRPRSLN  
 VLEINKRITEEQARKAFDRATKLEQEFTECFSAIVEGDSFEEIYHKVKRVEDLSGPYIWPVARELR

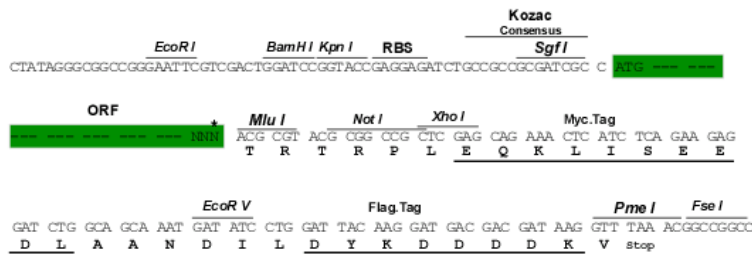
TRTRPLEQKLISEEDLANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6263\\_h09.zip](https://cdn.origene.com/chromatograms/mk6263_h09.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\_001365

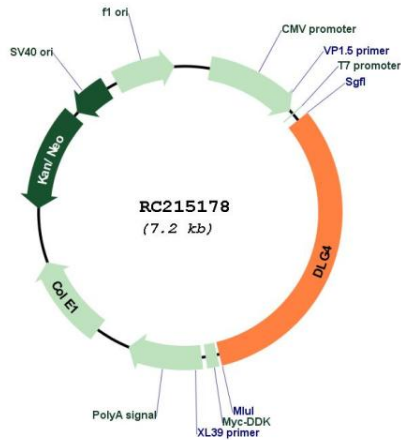
**ORF Size:** 2301 bp

**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](#)

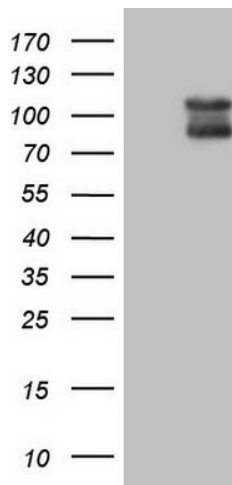
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001365.4</a>
<b>RefSeq Size:</b>	3995 bp
<b>RefSeq ORF:</b>	2304 bp
<b>Locus ID:</b>	1742
<b>UniProt ID:</b>	<a href="#">P78352</a>
<b>Cytogenetics:</b>	17p13.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Huntington's disease
<b>MW:</b>	85.2 kDa
<b>Gene Summary:</b>	This gene encodes a member of the membrane-associated guanylate kinase (MAGUK) family. It heteromultimerizes with another MAGUK protein, DLG2, and is recruited into NMDA receptor and potassium channel clusters. These two MAGUK proteins may interact at postsynaptic sites to form a multimeric scaffold for the clustering of receptors, ion channels, and associated signaling proteins. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

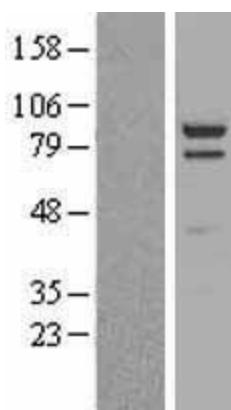
Product images:



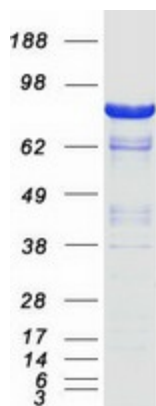
Circular map for RC215178



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DLG4 (Cat# RC215178, 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-DLG4 (1:2000) (Cat# [TA809015]). Positive lysates [LY419977] (100ug) and [LC419977] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419977]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215178 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DLG4 protein (Cat# [TP315178]). The protein was produced from HEK293T cells transfected with DLG4 cDNA clone (Cat# RC215178) using MegaTran 2.0 (Cat# [TT210002]).