

## Product datasheet for **RC207145**

### **NSP3 (SH2D3C) (NM\_170600) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NSP3 (SH2D3C) (NM_170600) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NSP3
Synonyms:	CHAT; NSP3; PRO34088; SHEP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC207145 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGACAGAGGGGACCAAGAAGACCAGCAAAAAGTTCAAGTTCTTCAAGTTCAAGGGCTTTGGGAGTCTCT  
 CCAACCTCCCTCGGTCCTTCACTCTGAGACGATCCTCAGCTTCCATCAGTAGGCAGTCCCATTTGGAGCC  
 TGACACCTTTGAAGCCACGCAGGATGACATGGTGACGGTGCCCAAGAGTCCCCAGCCTATGCCCGTCC  
 AGTGACATGTACAGCCACATGGGCACCATGCCTCGCCCCAGCATCAAGAAAGCACAGAACTCACAGGCTG  
 CCCGGCAGGCCAGGAGGCGGTCCCAAGCCAACTTGGTACCCGGAGGTGTACCCGACCCCCAGGCTT  
 GGAGGCAGCCAAAGAGGTGATGGTGAAGGCCACTGGCCCTCTAGAGGACACCCAGCAATGGAACCCAAC  
 CCTTCAGCAGTGGAGGTAGACCCCATCAGAAAGCCTGAGGTCCCCACAGGAGACGTAGAAGAGGAGAGAC  
 CTCCCAGGGACGTGCACTCAGAAAGGGTGTCTGGAGAGCCAGAGGCTGGCAGCGACTATGTGAAGTTCTC  
 CAAGGAGAAGTACATCCTGGACTCATCGCCAGAGAACTCCACAAGGAATTGGAGGAGGAGCTCAAACCTC  
 AGCAGCACGGATCTCCGACGCCATGCCTGGTACCATGGCCGCATCCCCGAGAGGTCTCGGAGACCTTGG  
 TACAACGCAACGGCGACTTCTCATCCGGGACTCACTACCAGCCTGGGCGACTATGTGCTCACGTGCCG  
 CTGGCGCAACCAGGCCTTGCCTTCAAGATCAACAAGGTGGTGGTGAAGGCAGGCGAGAGCTACACACAC  
 ATCCAGTACCTGTTTGGCAGGAGAGCTTTGACCACGTGCCCCGCCCTCGTGCCTATCATGTGGGAGCC  
 GCAAGGCTGTGTAGAGCAGAGTGGTGCCATCATCTACTGCCCGTGAACCCGACCTTCCCACTGCGCTA  
 CCTCGAGGCCAGCTATGGCCTGGGACAGGGGAGTAGCAAGCCTGCTAGCCCCGTAGCCCCCTCAGGCCCC  
 AAGGGCAGCCACATGAAGCGGCGCAGCGTCACCATGACCGATGGGCTCACTGCTGACAAGGTCAACCCGCA  
 GGATGGCTGCCACCAGTACGTGCTGCCCGCCCTCGGACTCCATCCGAGCTGTGCCCTCAGCATCAGC  
 GGACCAGATCCCAGACCTGCCTACCCATGTCCGCCATCTCCGAGAGCCCTAGCTCCCCTGCCTACAGC  
 ACTGTAACCCGTGTCCATGCCGCCCTGCAGCCCTTCTGCCACAGCATTGCCTGCCTCCCCTGTGCCG  
 GCCGTTCCAGTGAGCCCCAGCTGTGTCCCGAAGTGCCCCAAAGACCCATGGGGAGTCAGACAAGGGCCC  
 CCACACCAGCCCCCCCACACCTTGGCAAGGCCCTCCCCGTACCATCACTCAGCAGCTACAGTGACCCG  
 GACTCTGGCCACTACTGCCAGCTCCAGCCTCCCGTGCCTGGCAGCCGAGAGTGGGAGCGACTGAGACCT  
 CCAGCCAGCAGGCCAGGAGCTATGGGGAGAGGCTAAAGGAACTGTGAGAAAATGGGGCCCTGAAGGGGA  
 CTGGGGCAAGACCTTACAGTCCCCATCGTGGAAGTCACTTCTTCTTCAACCCGGCCACCTTCCAGTCA  
 TACTGATCCCCAGGGATAACCGGCCACTGGAGGTGGGCTTCTGCGCAAGGTCAAGGAGCTGCTGGCAG  
 AAGTGGATGCCCGGACGCTGGCCCGCATGTACCAAGGTGGACTGCCTGGTTGCTAGGATACTGGGCGT  
 TACCAAGGAGATGCAGACCCATAATGGGAGTCCGCTGGGGCATGGAAGTGTCAACCCTCCCCATGGCCG  
 CAGCTACGCCTAGACCTGCTGGAAGGTTCCACACCATGTCCATCATGCTGGCCGTGGACATCCTGGGCT  
 GCACCGGCTCTGCGGAGGAGCGGCAGCGCTGCTGCACAAGACCATTCAGCTGGCGGCCGAGCTGCGGGG  
 GACTATGGGCAACATGTTAGCTTCCGGCGGTGATGGGTGCCCTGGACATGGCTCAGATTTCTCGGCTG  
 GAGCAGACATGGGTGACCCTGCGGCAGCGACACACAGAGGGTCCATCCTGTACGAGAAGAAGCTCAAGC  
 CTTTTCTCAAGAGCCTCAACGAGGGCAAGAAGGCCCGCCGCTGAGCAACACCACGTTTCTCATGTGCT  
 GCCCTCATCACCTGCTGGAGTGTGACTCGGCCCAACAGAGGGCCCTGAGCCCTGGGCGACACGGAG  
 CACGGCGTGGAGGTGGTGTGGCTCACCTGGAGGCCCGCCGACAGTGGCACACCACGGAGCCTGTACC  
 ACACCAATGCTGAAGTCAAGCTGCAGGGTTCAGGCCCGGCCGAGCTCCTGGAGGTGTTGAGCAGGGA  
 GTTCCAGATGCGCCTTCTGCGGCAGTCAGGGTGCAGCAGCAGCCAGGCCCGGCGCTATGAGAAGTTC  
 GACAAGGTCTCACTGCCTGTCCACAAGCTGGAACCTGCTGTCCGCTCCAGCGAGCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC207145 protein sequence  
 Red=Cloning site Green=Tags(s)

MTEGTTKTSKKFKFFKFKFGFSLNLPFSFTLRSSASISRQSHLEPDTFEATQDDMVTVPKSPPAYARS  
 SDMYSHMGTMPPRSIKKAQNSQAARQAQEAGPKPNLVGGVDPDPPGLEAAKEVMVKATGPLEDTPAMEPN  
 PSAVEVDPIRKPEVPTGDVEEERPPRDVHSEAAAGEPEAGSDYVKFSKEKYILDSSPEKLHKELEELK  
 SSTDLRSHAWYHGRIPREVSETLVQRNGDFLIRDLSLTLG DYVLT CRWRNQLHFKINKV VVKAGESYTH  
 IQYLFEQESFDHVPALVRYHVGSRKAVSEQSGAIYCPVNRTPFLRYLEASYGLGQGSSKPASVSPSPG  
 KGSHMKRRSVTMTDGLTADKVTRSDGCPSTSTSLPRPRDSIRSCALSMQIPDLHSPMSPISESPSSPAY  
 TVTRVHAAPAAPSATALPASPVARRSSEPQLCPGSAPKTHGESDKGPHTSPSHTLGKASPSLSYSDP  
 DSGHYCQLQPPVRSREWAATETSSQARSYGERLKELENGAPEGDWGTFTVPIVEVTSFNPAFTQS  
 LLIPRDNRPLEVGLLRKVKELLA EVDARTLARHVTKVDCLVARILGVTKEMQTLMGVRWGMELLTLPHGR  
 QLRDLLERFHTMSIMLAVDILGCTGSAEERAALLHKTQLAAELRGTMGNMFSFAAVMGALDMAQISRL  
 EQTWVTLRQRHTEGAILYEKCLKPFLKSLNEGKEGPPLSNTTFPHVLP LITLLECD SAPPEGPEPWGSTE  
 HGVVVL AHLEAARTVAHHGGLYHTNAEVKLQGFQARPELLEVFSTEFQMRLWGSQ GASSQARRYEK  
 DKVLTALSHKLEPAVRSSSEL

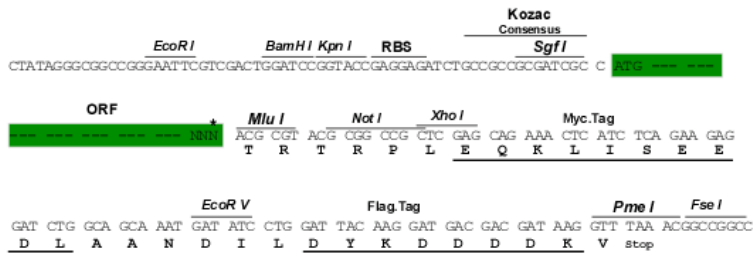
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6694\\_a12.zip](https://cdn.origene.com/chromatograms/mk6694_a12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

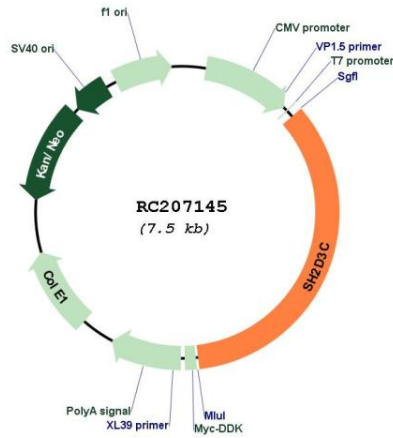
Cloning sites used for ORF Shuttling:



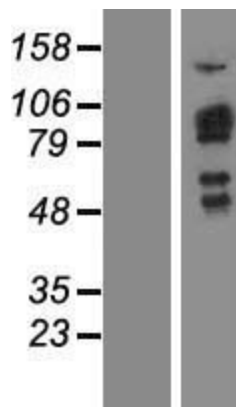
\* The last codon before the Stop codon of the ORF

<b>ACCN:</b>	NM_170600
<b>ORF Size:</b>	2580 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	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>RefSeq:</b>	<a href="#">NM_170600.1</a> , <a href="#">NP_733745.1</a>
<b>RefSeq Size:</b>	3165 bp
<b>RefSeq ORF:</b>	2583 bp
<b>Locus ID:</b>	10044
<b>UniProt ID:</b>	<a href="#">Q8N5H7</a>
<b>Cytogenetics:</b>	9q34.11
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	94.4 kDa
<b>Gene Summary:</b>	This gene encodes an adaptor protein and member of a cytoplasmic protein family involved in cell migration. The encoded protein contains a putative Src homology 2 (SH2) domain and guanine nucleotide exchange factor-like domain which allows this signaling protein to form a complex with scaffolding protein Crk-associated substrate. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]

Product images:



Circular map for RC207145



Western blot validation of overexpression lysate (Cat# [LY406911]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207145 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).