

## Product datasheet for **RC201220**

### **DLST (NM\_001933) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	DLST (NM_001933) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DLST
Synonyms:	DLTS; KGD2; PGL7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC201220 representing NM\_001933  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTGTCCCGATCCCGCTGTGTCTCGGGCGTTCAGCCGCTCGCTCTCCGCCCTCCAGAAGGGAACT  
 GCCCTCTAGGGAGACGTTCCCTGCCTGGGTCTCCTTATGCCAGGACCAGGTTACCCTAACAGCAGGAA  
 GGTGTGATTAACAACAGTGTCTTCAGTGTTCGCTTTTTCAGAACTACAGCTGTATGCAAGGATGACTTG  
 GTTACAGTCAAAACCCAGCGTTTGAGAATCTGTCACAGAGGAGATGTCAGGTGGGAGAAAGCTGTTG  
 GAGACACAGTTGCAGAAGATGAAGTGGTTGTGAGATTGAACTGACAAGACATCTGTGCAGGTTCCATC  
 ACCAGCAAATGGCGTATTGAAGCTCTTTGGTACCTGATGGGGAAAAGTCGAAGGAGGCACTCCACTT  
 TTCACACTCAGGAAAACCTGGTGTCTCCTGCTAAGGCCAAGCCGGCTGAAGCTCCTGCTGTCAGCCC  
 CAAAAGCAGAACCTACAGCAGCGGCAGTTCCTCCCCTGCAGCACCCATACCCACTCAGATGCCACCGGT  
 GCCCTCGCCCTACAACCTCCTTCTGGCAAACCTGTGTCTGCAGTAAAACCCACTGTTGCCCCACCTA  
 GCTGAGCCAGGAGCTGGCAAAGTCTGCGTTCAGAACATCGGGAGAAAATGAACAGGATGCGGCAGCGCA  
 TTGCTCAGCGTCTGAAGGAGGCCAGAATACATGTGCAATGCTGCAACTTTAATGAGATTGACATGAG  
 TAACATCCAGGAGATGAGGGCTCGGCACAAAGAGGCTTTTTTGAAGAAACATAACCTCAAAGTGGCTTC  
 ATGTCGGCATTGTGAAGGCCTCAGCCTTTGCCTTGCAAGAACAGCCTGTTGTAATGCAGTATTGACG  
 ACACAACCAAAGAGGTGGTGTATAGGGATTATATTGACATCAGTGTGCAAGTGGCCACCCACGGGTCT  
 GGTGGTTCCAGTCATCAGGAATGTGAAGCTATGAATTTGCAGATATTGAACGGACCATCACTGAAGT  
 GGAGAGAAGGCCCGAAAGAATGAACTTGCCATTGAAGATATGGATGGCGGTACCTTACCATTAGCAATG  
 GAGGCGTTTTTGGCTCGCTCTTTGGAACACCCATTATCAACCCCTCAGTCTGCCATCTGGGGATGCA  
 TGGCATCTTTGACAGGCCAGTGGCTATAGGAGGCAAGGTAGAGGTGCGGCCCATGATGTACGTGGCACTG  
 ACCTATGATCACCGGCTATTGATGGCAGAGAGGCTGTGACTTCTCCGCAAAATCAAGGCAGCGGTAG  
 AGGATCCAGAGTCTCCTCCTGGATCTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC201220 representing NM\_001933  
 Red=Cloning site Green=Tags(s)

MLSRSRCVSRFASRSLSAFQKGNCP LGRSLPGVSLCQGPYPNSRKVVINNSVFSVRFRTTAVCKDDL  
 VTKTPAFAESVTEGDVRWEKAVGDTVAEDEVVCEIETDKTSVQVPSANGVIEALLVPDGGKVEGGTPL  
 FTLRKTGAAPAKAKPAEAPAAAAPKAEP TAAAVPPPAAP IPTQMPPVPSQPPSGKPVSAVKPTVAPPL  
 AEPGAGKGLRSEHREKMNRMRQRI AQRLKEAQNTCAML TTFNEIDMSNIQEMRARHKEAFLKKNLKLGF  
 MSAFVKASAFALQE QPVVNAVIDDTTKEVVYRDYIDISVAVATPRGLVVPVIRNVEAMNFADIERTITEL  
 GEKARKNELAIEDMDGGFTTISNGGVFGSLFGTPIINPPQSAILGMHGIFDRPVAIGGKVEVRPMMYVAL  
 TYDHRLIDGREAVTFLRKIKAAVEDPRVLLLDL

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg4103\\_h01.zip](https://cdn.origene.com/chromatograms/mg4103_h01.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_001933

**ORF Size:** 1359 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\\_001933.2](#)
**RefSeq Size:** 2828 bp

**RefSeq ORF:** 1362 bp

**Locus ID:** 1743

**UniProt ID:** [P36957](#)
**Cytogenetics:** 14q24.3

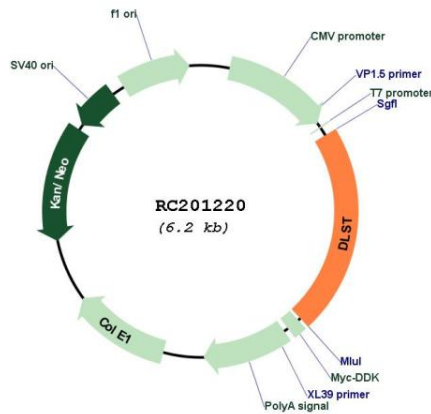
**Domains:** biotin\_lipoyl, 2-oxoacid\_dh

**Protein Pathways:** Citrate cycle (TCA cycle), Lysine degradation, Metabolic pathways

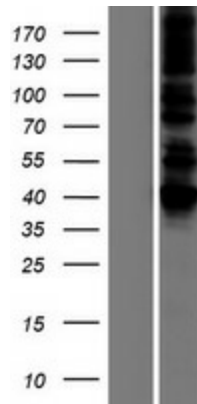
**MW:** 48.6 kDa

**Gene Summary:** This gene encodes a mitochondrial protein that belongs to the 2-oxoacid dehydrogenase family. This protein is one of the three components (the E2 component) of the 2-oxoglutarate dehydrogenase complex that catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO(2). Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Oct 2011]

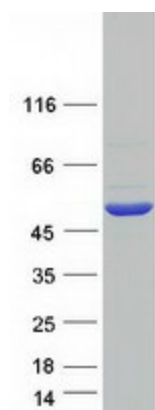
**Product images:**



Circular map for RC201220



Western blot validation of overexpression lysate (Cat# [LY419635]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201220 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DLST protein (Cat# [TP301220]). The protein was produced from HEK293T cells transfected with DLST cDNA clone (Cat# RC201220) using MegaTran 2.0 (Cat# [TT210002]).