

Product datasheet for **SC322745**

DSU (MREG) (NM_018000) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DSU (MREG) (NM_018000) Human Untagged Clone
Tag:	Tag Free
Symbol:	DSU
Synonyms:	DSU; WDT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for SC322745
 CGTGGACGCATGCGCCCCAAATTGCGCTCGGGGAATTAAGAGGGGAAAAAGCCCGA
 AGAAAACTCACGCCCCAAACAAACGCAAGGAGAGGAGGGCGCGCGCCTGCAGCCCTCG
 CCCGCGTCCCCGGCCGCGGCGTGATGCGCGCGGACCGCCGCGACGCCCGGGCTGCCGC
 TGTCCCGCACCTGGACGCTGGCGCGGTGGCCGCGCCCCAGCCTCGATCGCTCGCCGCGG
 CGACTCGGCCCCAGGCTTCCGGCGCCGGTGGGGGCCCTCGCTCTCCATGGGGCTGAGGGA
 CTGGCTGAGAACCGTGTGCTGCTGCTGCCGGTGGAGTGCTTGGAGGAGCGCCCTGCC
 TGAGAAGGAGCCCTCGTCAGTGATAACAATCCATATTCCTCATTGGAGCAACTCTGGT
 GAGGGATGATGAGAAGAATTTATGGAGTATGCCCCATGATGTGTCCACACAGAGGCAGA
 CGACGACAGAACCCTGTACAATTTGATAGTCATTTCGTAATCAGCAGGCCAAAGACTCAGA
 GGAGTGGCAGAAGCTCAACTATGATATCCATACCCTGCGCGAGGTTTGAAGGGAAGTAAG
 AAACAGATGGAAGTGCATCTTAGAAGATTTAGGTTTTCAAAGGAAGCTGACTCTTTGTT
 GTCAGTGACTAACTCAGCACCATCAGTGATTCTAAAAACACAAGGAAAGCTCGAGAGAT
 GTTGTTAAACTGGCTGAAGAAACCAATATTTTCCAACAAGTTGGGAGCTCTCAGAGAG
 ATATCTCTTTGTGTGGACCGTCTCATTGCACTTGATGCTGCAGAAAGATTCTTTAAGCT
 TGCTCGTCGAACCTACCCCAAGAAGCCTGGGGTCCATGCCTGGCAGATGGCCAGAAAGA
 ACTGCACTACCTTCCGTTTCCAAGTCCCTAAAGGAGAGGCTCAGGGGCAGAAATGGGAATT
 CTTCCATGAGGACTCAGCAGTCAACCAAGTTGGACAATTACATGTAGAAGAGAGTGAGC
 AAATAGAGTTTGCTTAGTGAAAAATGATACTGAATCTACATAAATGTAAAGTCTTTAAT
 CTGAGGACCCCTGCCCCATGAATTTGTGCAGGCTGCATTGAAACGCCTTGGTGATCTCATAT
 TTAGGAAGAAAGTTAAAGAGTTGGTCAGATGGATAGTTTATAATGGGTGGTTCATTCTG
 AGAGCCCATTGCCCCAGCTTTGGTTTTAGTTGTGCATAATCTCTGATCATTAACTCTAC
 TGACTGAGTGGACTATTTAGTTAATAAAACAATATGATTAATAGAGAGAGCTGTATTG
 AGTCCCAAAATGGATTGCCAGTTTTTAAATAATTATTATAAAATGTATGCTAACCCCAAA
 ATAATACTAGGCATGAGGTGACCTCTCTGATTTGGTCACCTTGTAGAACCCTAGAGGGTG
 TCAGGGCATCTCTTTGAGTATCAGTTATGATTATTCAGAAGTATAGATGTATCAAATGAT
 AGAAATGACAAGGAATGGCTGGGCGTGGTGGCTCATGCCTGTGATCCCAGCACTTTGGGA
 GGCCAAGGTGGGTGGATCATGAGGTGAGGAGTTCAAGACCAGCCTGACCAACATGGTGAA
 ACCCTGTCTCTACTAAAAATACAAAAATGGCCAGGTGTGATGGCACGCGCTTGAATCT
 CAGCCTCTGGAGTAGCTGGAACACAGGCGCGTGCCACCACACCTGGCTAATTTTTTGTA
 TTTTTGGTAGAGACGGGGTTTACCATGTTAGCCACGATGGTCTCGATCTCCTGACCTCG
 TCATCCGCTGCCCCAGCCTCCCAAAGTCTGGGATTACAGGCGTGAGTACCGCGCCCG
 GCCAAGCCCTTGGCATTATCTGGAATAGCATCTGTAAACTGAAGTGTTGACCTCTGT
 TTTCTTCTCTCTCTTTTCATCTGTTTCTGATTCTGGTGGCAGCTGCACCTGTGGGGG
 GACCTCTCATGCATACTTGACATATGCAGGGAGTATTGCACTGAAGATCTTTGTGGAC
 CTTCTTCTCTTCAGAAGATAATTTTCAAAGGGAGCAATGCTGTGAATGCAGCTTGCTTC
 TCTCTACAGATTGAGAAGTCCAGCTTCAAAGTTACTTGCCACTTAAGCAAGGAAGTTGT
 CAAGAGATCATGGTTCATGTTACTGAAAAGACTTTAAGGATTTGTAAGGTTAATCCATAG
 ATTGCTGAGAACAATGGAATATTTTTATTTTACAGATTTTGCACTTCTGAATTCAGGT
 TAAAACTAACTTGATTTAGTCTGCTTAGAGGACTGTGACTTGAAAAATTTTATATACC
 AATGAGCTTTTTGGTAGCGTCCCAATGTTTAAATATTTATAGGCGAGATCCGTGTTT
 TCCATTTATTAATGCATTGCAGACCAATTTAACTGCTGTGTTTCAAGAAAATTTCTTCTA
 GTTTAATAAGCAAGCTAAAAGTTTTATTTTATATTTAGTGCTTAATCTTTGCCTCATG
 TTATGTAAATAGCCTGCAGATATTTCTCTCAATTCTGTAGACTCTCGCAAGATAAAC
 ATTCAAACAGTGAAACAAACAATAAAATAAACTAAAAA

Restriction Sites: Please inquire

ACCN: NM_018000

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<u>NM_018000.2</u> , <u>NP_060470.2</u>
RefSeq Size:	3213 bp
RefSeq ORF:	645 bp
Locus ID:	55686
UniProt ID:	<u>Q8N565</u>
Cytogenetics:	2q35
Gene Summary:	Probably functions as cargo-recognition protein that couples cytoplasmic vesicles to the transport machinery. Plays a role in hair pigmentation, a process that involves shedding of melanosome-containing vesicles from melanocytes, followed by phagocytosis of the melanosome-containing vesicles by keratinocytes. Functions on melanosomes as receptor for RILP and the complex formed by RILP and DCTN1, and thereby contributes to retrograde melanosome transport from the cell periphery to the center. Overexpression causes accumulation of late endosomes and/or lysosomes at the microtubule organising center (MTOC) at the center of the cell. Probably binds cholesterol and requires the presence of cholesterol in membranes to function in microtubule-mediated retrograde organelle transport. Binds phosphatidylinositol 3-phosphate, phosphatidylinositol 4-phosphate, phosphatidylinositol 5-phosphate and phosphatidylinositol 3,5-bisphosphate, but not phosphatidylinositol 3,4-bisphosphate or phosphatidylinositol 4,5-bisphosphate (By similarity). Required for normal phagosome clearing and normal activation of lysosomal enzymes in lysosomes from retinal pigment epithelium cells (PubMed:19240024). Required for normal degradation of the lipofuscin component N-retinylidene-N-retinylethanolamine (A2E) in the eye. May function in membrane fusion and regulate the biogenesis of disk membranes of photoreceptor rod cells (By similarity).[UniProtKB/Swiss-Prot Function]