

Product datasheet for **RG200743**

ESS2 (NM_022719) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	ESS2
Synonyms:	bisl; DGCR13; DGCR14; DGS-H; DGS-I; DGSH; DGSI; ES2; Es2el; ESS-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG200743 representing NM_022719
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGACGCCGGGCGCATCAGCGTCGTCCTTGTGCTTCCCGCCGCTCCAGGCCCGGAGGAAGCGCG
 AGGCGGGAGAGGCTGGGGCTGCGACGAGCAAGCAGCGGCTCTGGACGAGGAAGAGTATATCGAGGGCCT
 CCAGACGGTCATCCAAAGGGATTTCTTCTCTGATGTGGAGAAGCTCCAGGCACAGAAGGAGTACCTGGAA
 GCCGAGGAGAATGGAGACTTGAACGGATGCGCCGATTGCCATCAAGTTTGGCTCTGCCTTGGGCAAGA
 TGTCCCGGGAGCCCCGCCACCCTATGTGACTCCAGCCACATTTGAAACCCCTGAGGTGCATGCAGGCAC
 TGGAGTGGTGGGCAACAAGCCAGGCCCGCGCCGAGGCTGGAGGATGGAGAGGCTGGAGAGGAGGAG
 GAGAAGGAGCCGCTGCCAGCCTAGATGTCTTCTGAGCCGCTACACGAGTGAGGACAATGCCTCCTTCC
 AGGAGATCATGGAGGTGCCAAGGAGAGAAGCCGGGCACGCCACGCTTGGCTCTACCAGGCTGAGGAAGA
 GTTTGAGAAGAGGCAGAAAGATAATCTCGAACTCCCGTCAGCAGAGCACCAGGCCATCGAGAGCAGCCAG
 GCCAGTGTGGAGACCTGGAAGTACAAGGCCAAGAATTCCTCATGTACTATCCAGAGGGTGTCCCTGACG
 AGGAGCAGCTGTTAAGAAGCCCCGGCAGGTGGTACATAAGAACACGCGCTTCCTTAGGGACCCCTTCAG
 CCAAGCCCTGAGCAGGTGCCAGCTCCAGCAGGCAGCCGCCCTCAATGCCAGCACAACAGGGCAAGGTG
 GGCCCCGATGGCAAGGAGCTGATCCCCAGGAGTCCCTCGAGTGGGTGGATTGGATTGTTGCCACTC
 CTTCCCTGCCCTGGTGTGAACGAGTCCCGATGATGACCTGGGGGGAGGTTGAGAACACACCCTTGAG
 AGTTGAAGGGTCGAAACGCCCTACGTGGACAGGACACCCGGCCAGCTTTAAGATCCTGGAGCCAGGC
 CGCAGGGAGCGGCTGGGTCTGAAGATGGCCAACGAGGCGCTGCCAAGAACGGGCCAAGAAGCAGGAAG
 CCTTGGGAGAGTGACGAGAATCTGGCCAGCCTACCCCCAAAGGCTGAGCCAGCCATGTCGCCAGC
 CCTACAGCGCCTTGTGAGCAGGACGCCAGCAAGTACACAGACCGGGCCCTGCGGGCCAGCTACACACCA
 TCCCCAGCAGCTCCACCCACCTCAAGACCCCGGCCAGTGGGCTGCAGACCCCAAGCACACCGGCGC
 CTGGCTCTGCCACACGACCCCTCTCACAGGACCCGGCCTCCATCACGGACAACCTGTGTCAGCTCCC
 TGCCCCGGCGCAAAGCTTCGACTTCTTT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG200743 representing NM_022719
 Red=Cloning site Green=Tags(s)

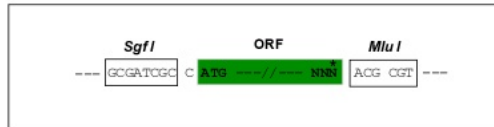
METPGASASSLLLPAAASRPPRKREAGEAGAATSKQRLDEEEYIEGLQTVIQRDFFPDVEKLQAQKEYLE
 AEENGLERMRQIAIKFGSALGKMSREPPPYVTPATFETPEVHAGTGTVGNKPRPRGRGLEDGEAGEEE
 EKEPLPSLDVFLSRYTSEDNASFQIMEVAKERSRARHAWLYQAEFEKQKDNLELPSAEHQAISSQ
 ASVETWKYKAKNSLMYYPEGVPDEEQLFKKPRQVVKNTFRFLRDPFSQALSRCQLQQAALNAQHKQGV
 GPDGKELIPQESPRVGGFGFVATPSPAPGVNESPMMTWGEVENTPLRVEGSETPYVDRTPGPAFKILEPG
 RRERLGLKMANEAAKNRAKKQEALRRVTENLASLTPKGLSPAMSPALQRLVSRTASKYTDRLRASYP
 SPARSTHLKTPASGLQTPSTPAPGSATRTPLTQDPASITDNLQLPARRKASDFF

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI
 CTATAGGGCGCGCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT
 HindIII NheI RsrII MluI NotI XhoI GFP Tag
 CAAGCTTAAGTACTAGTAGCGGACG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---
 T R T R P L E M E S D - - -
 --- GAA GAA AGA GTT TAA ACGGCCGCCCGGAGCT
 - - E E R V Stop

ACCN: NM_022719

ORF Size: 1428 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.

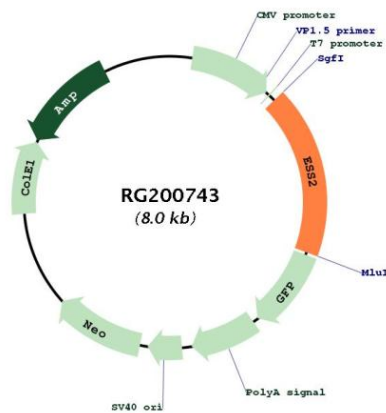
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_022719.3](#)

RefSeq Size: 5405 bp
RefSeq ORF: 1431 bp
Locus ID: 8220
UniProt ID: [Q96DF8](#)
Cytogenetics: 22q11.2

Gene Summary: This gene is located within the minimal DGS critical region (MDGCR) thought to contain the gene(s) responsible for a group of developmental disorders. These disorders include DiGeorge syndrome, velocardiofacial syndrome, conotruncal anomaly face syndrome, and some familial or sporadic conotruncal cardiac defects which have been associated with microdeletion of 22q11.2. The encoded protein may be a component of C complex spliceosomes, and the orthologous protein in the mouse localizes to the nucleus. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Dec 2015]

Product images:



Circular map for RG200743