

## Product datasheet for **MG201440**

### Mesdc2 (BC014742) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Mesdc2 (BC014742) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Mesdc2  
**Synonyms:** 2210015O11Rik; AW537813; mesd; mKIAA0081; msd  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG201440 representing BC014742  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCGCGACTTCTGGAGCAGTGGGAGAAAGATGATGACATAGAAGAAGGAGACCTCCAGAACACAAGA  
 GACCTCAGCACCTATCGACTTCTCAAAGCTAGACCCAGGCAAACCTGAGAGCATCTTGAAAATGACAAA  
 GAAAGGGAAGACTCTGATGATGTTTGTACCGTGTCTGGGAACCCACCGAGAAGGAGACAGAGGAGATC  
 ACCAGCCTGTGGCAGGTAGCCTGTTCAACGCCAACTATGACGTTCAAGAGTTCATCGTGGGATCCGACC  
 GCGCCATCTTCATGCTCCGGGATGGGAGCTATGCCTGGGAGATCAAGACTTTTTGGTCAGTCAAGACCG  
 GTGTGCTGAAGTCACTCTAGAGGACAGATGTATCCTGGCAAAGGAGGAGGAAGCAAGGAGAAAAATAAA  
 ACAAAGCCAGAGAAGGCTAAAAAGAAGGAGGGAGATCCCAAACCGTGTCTCCAAGGAAGACAATCGAG  
 CTGGGAGCAGAAGAGAAGACCTT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG201440 representing BC014742  
 Red=Cloning site Green=Tags(s)

MARLLEQWEKDDDDIEEGDLPEHKRPSAPIDFSKLDPGKPESILKMTKKGKTLMMFVTVSGNPTEKETEEI  
 TSLWQGSFLNANYDVQRFIVGSDRAIFMLRDGSYAWIEMDFLVSQDRCAEVTLEGQMPYGGKGGGSKEKNK  
 TKPEKAKKKEGDPKPRASKEDNRAGSRREDL

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** BC014742

**ORF Size:** 515 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:** [BC014742](#), [AAH14742](#)

**RefSeq Size:** 1876 bp

**RefSeq ORF:** 515 bp

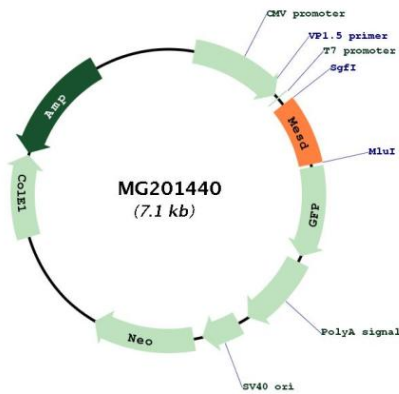
**Locus ID:** 67943

**Cytogenetics:** 7 D3

**Gene Summary:**

Chaperone specifically assisting the folding of beta-propeller/EGF modules within the family of low-density lipoprotein receptors (LDLRs). Acts as a modulator of the Wnt pathway through chaperoning the coreceptors of the canonical Wnt pathway, LRP5 and LRP6, to the plasma membrane. Essential for specification of embryonic polarity and mesoderm induction (PubMed:12581525). Plays an essential role in neuromuscular junction (NMJ) formation by promoting cell-surface expression of LRP4 (PubMed:24140340). May regulate phagocytosis of apoptotic retinal pigment epithelium (RPE) cells (PubMed:27184668).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG201440