

## Product datasheet for **RG221950**

### Dectin 1 (CLEC7A) (NM\_197948) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Dectin 1 (CLEC7A) (NM\_197948) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** CLEC7A  
**Synonyms:** BGR; CANDF4; CD369; CLECSF12; DECTIN1; SCARE2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG221950 representing NM\_197948  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAATATCATCCTGATTTAGAAAATTTGGATGAAGATGGATATACTCAATTACACTTCGACTCTCAA  
 GCAATACCAGGATAGCTGTTGTTTCAGAGAAAGGATCGTGTGCTGCATCTCCTCTTGCGCCTCATTGC  
 TGTAAATTTGGGAATCCTATGCTTGTAATACTGGTGATAGCTGTGGTCTGGTACCATGGCTATTTGG  
 AGATCCAATTCAGGAAGCAACACATTGGAGAATGGCTACTTTCTATCAAGAAATAAAGAGAACCACAGTC  
 AACCCACACAATCATCTTTAGAAGACAGTGTGACTCCTACCAAAGCTGTCAAACCACAGGGTTCTTTC  
 CAGCCCTTGCTCCTAATTGGATTATATATGAGAAGAGCTGTTATCTATTCAGCATGCTACTAAATTC  
 TGGGATGGAAGTAAAAGACAATGCTGGCAACTGGGCTCTAATCTCCTAAAGATAGACAGCTCAAATGAAT  
 TGATTTTCAGATCAGAACCACAGTACCCAAGAAAACCCATCTCCAATTGTGTATGGATTACGTTGTCAG  
 TCATTTA

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG221950 representing NM\_197948  
 Red=Cloning site Green=Tags(s)

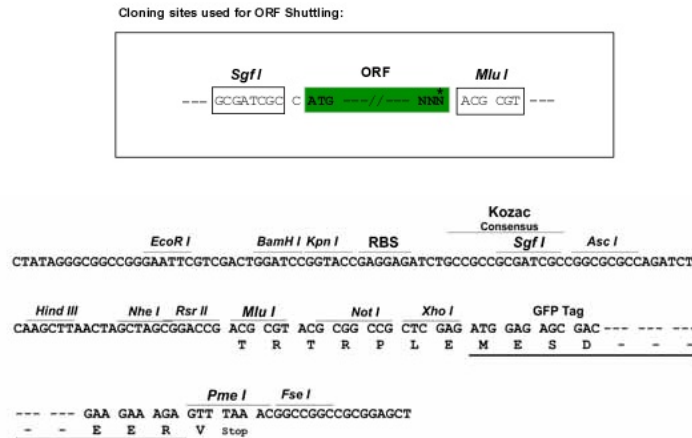
MEYHPDLENLDEDGYQLHFDSQSNTRIAVVSEKGSAAAPPWRLIAVILGILCLVILVIAVVLGTMAIW  
 RNSNGSNTLENGYFLSRNKENHSQPTQSSLEDSVTPTKAVKTTGVLSSPCPPNWIIEKSCYLFMSLNS  
 WDGSKRQCWQLGSNLLKIDSSNELISDQNHSPKPIKLCMDSRVSHL

**TRTRPLE** - GFP Tag - V

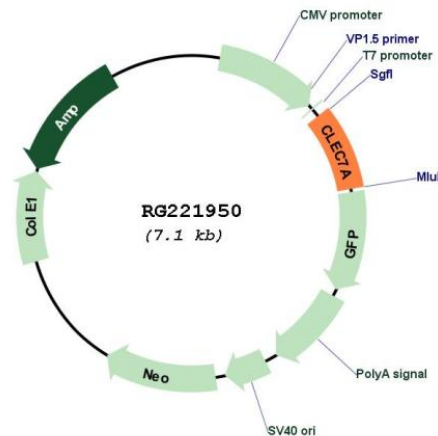
**Restriction Sites:** Sgfl-MluI



Cloning Scheme:



Plasmid Map:



ACCN: NM\_197948

ORF Size: 567 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\\_197948.3](#)

**RefSeq Size:** 2503 bp

**RefSeq ORF:** 570 bp

**Locus ID:** 64581

**UniProt ID:** [Q9BXN2](#)

**Cytogenetics:** 12p13.2

**Protein Families:** Druggable Genome, Transmembrane

**Gene Summary:** This gene encodes a member of the C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily. The encoded glycoprotein is a small type II membrane receptor with an extracellular C-type lectin-like domain fold and a cytoplasmic domain with an immunoreceptor tyrosine-based activation motif. It functions as a pattern-recognition receptor that recognizes a variety of beta-1,3-linked and beta-1,6-linked glucans from fungi and plants, and in this way plays a role in innate immune response. Alternate transcriptional splice variants, encoding different isoforms, have been characterized. This gene is closely linked to other CTL/CTLD superfamily members on chromosome 12p13 in the natural killer gene complex region. [provided by RefSeq, Jul 2008]