

## Product datasheet for **RC208772**

### FRG1 (NM\_004477) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FRG1 (NM_004477) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FRG1
Synonyms:	FRG1A; FSG1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208772 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGAGTACTCCTACGTGAAGTCTACCAAGCTCGTGCTCAAGGGAACCAAGACGAAGAGTAAGAAGA  
AAAAGAGCAAAGATAAGAAAAGAAAAGAGAAGAAGATGAAGAAACCCAGCTTGATATTGTTGGAATCTG  
GTGGACAGTAACAACTTTGGTGAATTCAGGAACCATAGCCATTGAAATGGATAAGGGAACCTATATA  
CATGCACTCGACAATGGTCTTTTACCCTGGGAGCTCCACACAAAGAAGTTGATGAGGGCCCTAGTCCTC  
CAGAGCAGTTTACGGCTGTCAAATTATCTGATTCCAGAATCGCCCTGAAGTCTGGCTATGGAAAATATCT  
TGGTATAAATTCAGATGGACTTGTGTTGGGCGTTCAGATGCAATTGGACCAAGAGAACAATGGGAACCA  
GTCTTTCAAAATGGGAAAATGGCTTTGTTGGCCTCAAATAGCTGCTTTATTAGATGCAATGAAGCAGGGG  
ACATAGAAGCAAAAAGTAAAACAGCAGGAGAAGAAGAAATGATCAAGATTAGATCCTGTGCTGAAAGAGA  
AACCAAGAAAAAGATGACATTCAGAAGAAGACAAAGGAAATGTAAAACAATGTGAAATCAATTATGTA  
AAGAAATTCAGAGCTTCCAAGACCACAACTTAAAATAAGTAAAGAAGACAGTAAAATCTTAAAAAGG  
CTCGAAAGATGGATTTTGCATGAGACGCTTCTGGACAGGAGGCCAAATTGAAAGCCGACAGATACTG  
CAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC208772 protein sequence  
 Red=Cloning site Green=Tags(s)

MAEYSYVKSTKLVLKGTKTSSKKKSKDKKRKREDEETQLDIVGIWWTNFGIEISGTIAIEMDKGTI  
 HALDNGLFTLGAPHKEVDEGSPPEQFTAVKLSDSRIALKSGYGKYLGINSDGLVVGSRDAIGPREQWEP  
 VFQNGKMALLASNSCFIRCNEAGDIEAKSKTAGEEEMIKIRSCAERETKKKDDIPEEDKGNVKQCEINY  
 KKFQSFQDHKLKISKEDSKILKKARKDGFLLHETLLDRRAKLRKADRYCK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6268\\_b06.zip](https://cdn.origene.com/chromatograms/mk6268_b06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_004477

**ORF Size:** 774 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\\_004477.3](#)

**RefSeq Size:** 1053 bp

**RefSeq ORF:** 777 bp

**Locus ID:** 2483

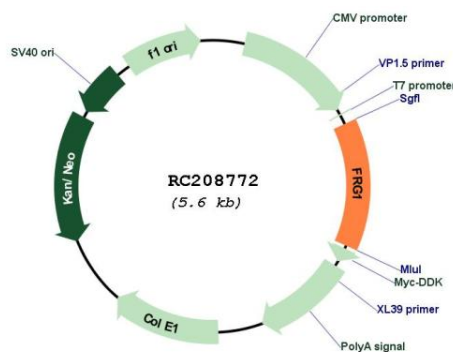
**UniProt ID:** [Q14331](#)

**Cytogenetics:** 4q35.2

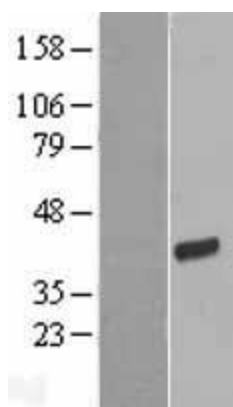
**MW:** 29.2 kDa

**Gene Summary:** This gene maps to a location 100 kb centromeric of the repeat units on chromosome 4q35 which are deleted in facioscapulohumeral muscular dystrophy (FSHD). It is evolutionarily conserved and has related sequences on multiple human chromosomes but DNA sequence analysis did not reveal any homology to known genes. In vivo studies demonstrate the encoded protein is localized to the nucleolus. [provided by RefSeq, Jul 2008]

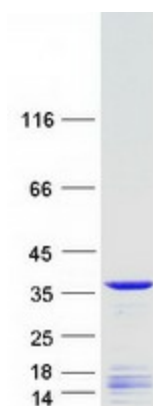
### Product images:



Circular map for RC208772



Western blot validation of overexpression lysate (Cat# [LY417951]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208772 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FRG1 protein (Cat# [TP308772]). The protein was produced from HEK293T cells transfected with FRG1 cDNA clone (Cat# RC208772) using MegaTran 2.0 (Cat# [TT210002]).