

## Product datasheet for **RC215291**

### **B7H3 (CD276) (NM\_025240) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** B7H3 (CD276) (NM\_025240) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** B7H3  
**Synonyms:** 4lg-B7-H3; B7-H3; B7H3; B7RP-2  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC215291 representing NM\_025240  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGCGTCGGCGGGGAGCCCTGGCATGGGTGTGCATGTGGGTGCAGCCCTGGGAGCACTGTGGTTCT  
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CCTGTGCTGCTCCTTCTCCCTGAGCCTGGCTCAGCCTGGCACAGCTCAACCTCATCTGGCAGCTGACA  
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CCCTCTTCCCGACCTGCTGGCACAGGGCAACGCATCCCTGAGGCTGCAGCGCTGCGTGTGGCGGACGA  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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**Protein Sequence:** >RC215291 representing NM\_025240  
Red=Cloning site Green=Tags(s)

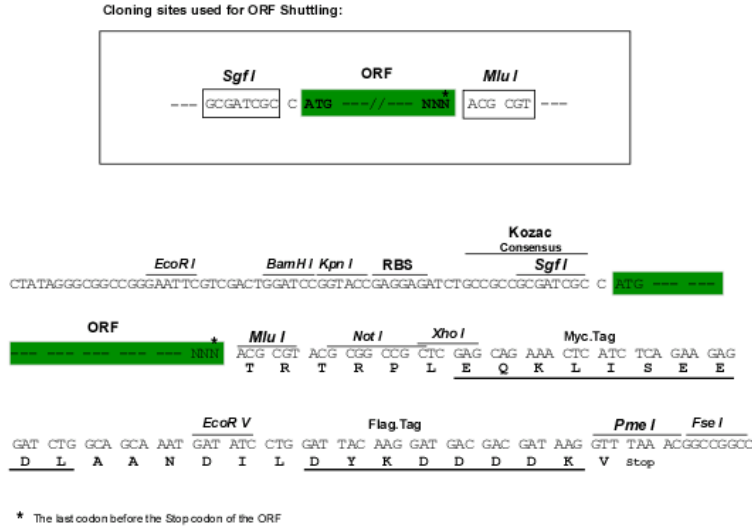
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 PYSKPSMTLEPNKDLRPGDTVITICSSYRGYPEAEVFWQDGGQVPLTGNVTTSQMANEQGLFDVHSLRV  
 VLGANGTYSCLVRNPVLQQDAHGSVTITGQPMTFPPEALWVTVGLSVCLIALVALAFVCRKIKQSCEE  
 ENAGAEDQDGEGESKTAALQPLKHSDSKEDDGGQEIA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6228\\_a05.zip](https://cdn.origene.com/chromatograms/mk6228_a05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_025240

**ORF Size:** 948 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\\_025240.2](#), [NP\\_079516.1](#)

**RefSeq Size:** 2765 bp

**RefSeq ORF:** 951 bp

**Locus ID:** 80381

**UniProt ID:** [Q5ZPR3](#)

**Cytogenetics:** 15q24.1

**Domains:** ig, IGc2, IG

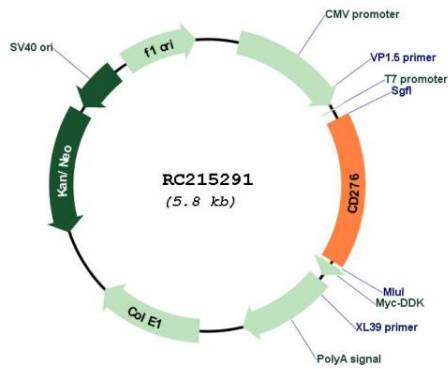
**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Cell adhesion molecules (CAMs)

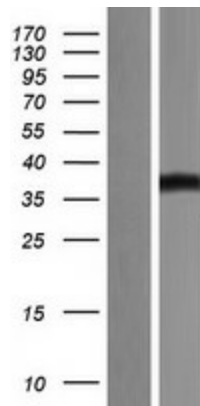
**MW:** 33.6 kDa

**Gene Summary:** The protein encoded by this gene belongs to the immunoglobulin superfamily, and thought to participate in the regulation of T-cell-mediated immune response. Studies show that while the transcript of this gene is ubiquitously expressed in normal tissues and solid tumors, the protein is preferentially expressed only in tumor tissues. Additionally, it was observed that the 3' UTR of this transcript contains a target site for miR29 microRNA, and there is an inverse correlation between the expression of this protein and miR29 levels, suggesting regulation of expression of this gene product by miR29. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]

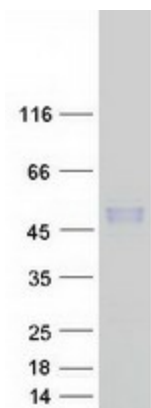
Product images:



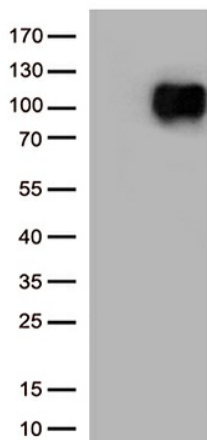
Circular map for RC215291



Western blot validation of overexpression lysate (Cat# [LY410803]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215291 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CD276 protein (Cat# [TP315291]). The protein was produced from HEK293T cells transfected with CD276 cDNA clone (Cat# RC215291) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CD276 (Cat# RC215291, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CD276 antibody (Cat# [TA813302])(1:1000)