

## Product datasheet for **RG210360**

### **B7H4 (VTCN1) (NM\_024626) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	B7H4 (VTCN1) (NM_024626) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	B7H4
Synonyms:	B7-H4; B7h.5; B7H4; B7S1; B7X; PRO1291; VCTN1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG210360 representing NM_024626 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCCCTGGGGCAGATCCTCTTCTGGAGCATAATTAGCATCATCATTATTCTGGCTGGAGCAATTG  
CACTCATCATTGGCTTTGGTATTTTCAGGGAGACTCCATCACAGTCACTACTGTCGCCTCAGCTGGGAA  
CATTGGGGAGGATGGAATCCTGAGCTGCACTTTTGAACCTGACATCAAATTTCTGATATCGTGATACAA  
TGGCTGAAGGAAGGTGTTTTAGGCTTGGTCCATGAGTTCAAAGAAGGCAAAGATGAGCTGTCGGAGCAGG  
ATGAAATGTTTCAAGGCCGACAGCAGTGTGGTCTGATCAAGTGATAGTTGGCAATGCCTCTTTGCGGCT  
GAAAAACGTGCAACTCACAGATGCTGGCACCTACAAATGTTATATCATCACTTCTAAAGCAAGGGGAAT  
GCTAACCTTGAGTATAAACTGGAGCCTTCAGCATGCCGGAAGTGAATGTGGACTATAATGCCAGCTCAG  
AGACCTTGCGGTGTGAGGCTCCCGATGGTTCCCCCAGCCACAGTGGTCTGGGCATCCCAAGTTGACCA  
GGGAGCCAACCTTCTCGGAAGTCTCCAATACCAGCTTTGAGCTGAACTCTGAGAATGTGACCATGAAGTT  
GTGTCTGTGCTCTACAATGTTACGATCAACAACACATACTCTGTATGATTGAAAATGACATTGCCAAAG  
CAACAGGGGATACAAAGTGACAGAATCGGAGATCAAAGGCGGAGTACCTACAGCTGCTAAACTCAA  
GGCTTCTGTGTGTCTCTTCTTTTCCATCAGCTGGGCACTTCTGCCTCTCAGCCCTACCTGATG  
CTAAAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG210360 representing NM\_024626  
 Red=Cloning site Green=Tags(s)

MASLGQILFWSIISIIIIILAGAIALIIGFGISGRHSITVTTVASAGNIGEDGILSCTFEPDIKLSDIVIQ  
 WLKEGVLGLVHEFKEGKDELSEQDEMFRGRTAVFADQVIVGNASLRLKNVQLTDAGTYKCYIITSKGGKN  
 ANLEYKTGAFSMPEVNVNDYNASSETLRCEAPRWFPOPTVWASQVDQGANFSEVSNTSFELNSENVTMKV  
 VSVLYNVTINNTYSCMIENDIAKATGDIKVTSEIKRRSHLQLLNSKASLCVSSFFAISWALLPLSPYLM  
 LK

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_024626

**ORF Size:** 846 bp

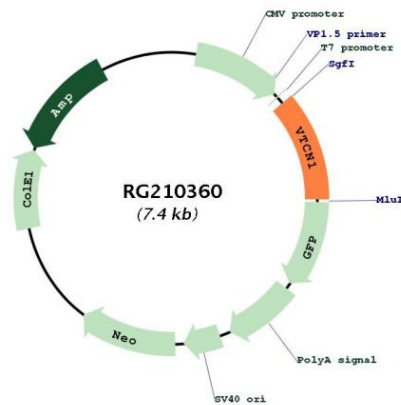
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_024626.4](#)
- RefSeq Size:** 1811 bp
- RefSeq ORF:** 849 bp
- Locus ID:** 79679
- UniProt ID:** [Q7Z7D3](#)
- Cytogenetics:** 1p13.1-p12
- Protein Families:** Transmembrane
- Gene Summary:** This gene encodes a protein belonging to the B7 costimulatory protein family. Proteins in this family are present on the surface of antigen-presenting cells and interact with ligand bound to receptors on the surface of T cells. Studies have shown that high levels of the encoded protein has been correlated with tumor progression. A pseudogene of this gene is located on chromosome 20. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]

**Product images:**



Circular map for RG210360