

## Product datasheet for **RC210218**

### **BMPR1B (NM\_001203) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	BMPR1B (NM_001203) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMPR1B
Synonyms:	ALK-6; ALK6; AMDD; BDA1D; BDA2; CDw293
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC210218 representing NM\_001203  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGCTTTTGC AAGTGCAGGAAAATTAATGTGGCACCAAGAAAGAGGATGGT GAGAGTACAGCCCCCA  
 CCCCCGTCCAAAGTCTTGC GTTGTAAATGCCACCACCATTTGCCAGAAGACTCAGTCAACAATATTTG  
 CAGCACAGACGGATATTGTTTCACGATGATAGAAGAGGATGACTCTGGGTTGCCTGTGGTCACTTCTGGT  
 TGCTTAGGACTAGAAGGCTCAGATTTTTCAGTGTGGGACACTCCCATTCTCATCAAAGAAGATCAATTG  
 AATGCTGCACAGAAAGGAACGAATGTAATAAAGACCTACACCCTACACTGCCTCCATTGAAAAACAGAGA  
 TTTTGTGATGGACCTATACACCACAGGGCTTTACTTATATCTGTGACTGTCTGTAGTTTGTCTTGGTC  
 CTTATCATATTATTTGTTACTTCCGGTATAAAAGACAAGAAACCAGACCTCGATACAGCATTGGGTTAG  
 AACAGGATGAAACTTACATTCCTCCTGGAGAATCCCTGAGAGACTTAATTGAGCAGTCTCAGAGCTCAGG  
 AAGTGGATCAGGCTCCCTCTGCTGGTCCAAGGACTATAGCTAAGCAGATTCAGATGGTAAAACAGATT  
 GAAAAAGTTCGCTATGGGGAAGTTTGGATGGGAAAGTGGCGTGGCGAAAAAGGTAGCTGTGAAAGTGTCT  
 TACCACAGAGGAAGCCAGCTGGTTCAGAGAGACAGAAATATATCAGACAGTGTGATGAGGCATGAAAA  
 CTTTTGGGTTTCATTGCTGCAGATATCAAAGGGACAGGGTCTGGACCCAGTTGTACCTAATCAGACAG  
 TATCATGAAAAAGTTCCCTTTATGATTATCTGAAGTCCACCACCTAGACGCTAAATCAATGCTGAAGT  
 TAGCCTACTCTTCTGTCAGTGGCTTATGTCATTTACACACAGAAATCTTTAGTACTCAAGGCAAACCAGC  
 AATTGCCCATCGAGACTGAAAAGTAAAAACATTTCTGGTGAAGAAAAATGGAAGTGTGCTGTATTGCTGAC  
 CTGGGCTGGCTGTTAAATTTATTAGTGATACAAATGAAGTTGACATACCACCTAACACTCGAGTTGGCA  
 CCAAACGCTATATGCCTCCAGAAGTGTGGACGAGAGCTTGAACAGAAATCACTTCCAGTCTTACATCAT  
 GGCTGACATGTATAGTTTTGGCCTCATCCTTTGGGAGGTTGCTAGGAGATGTGTATCAGGAGGTATAGTG  
 GAAGAATACCAGCTTCTTATCATGACCTAGTGGCCAGTGACCCCTCTTATGAGGACATGAGGGAGATTG  
 TGTGCATCAAGAAGTTACGCCCTCATTCCCAAACCGGTGGAGCAGTGTGAGTGTCTAAGGCAGATGGG  
 AAAACTCATGACAGAATGCTGGGCTCACAATCTGCATCAAGGCTGACAGCCCTGCGGGTTAAGAAAAACA  
 CTTGCCAAAATGTCAGAGTCCCAGGACATTAAACTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC210218 representing NM\_001203  
 Red=Cloning site Green=Tags(s)

MLLRSAGKLN VGTKKEDGESTAPTRPKVLRCKHHHPEDSVNNICSTDG YCFMTIEEDDSGLPVVTSG  
 CLGLEGSDFQCRDTPIPHQRRIECCTERNECNKDLHPTLPPLKNRDFVDGPIHHRALLISVTVCSLLLV  
 LIILFCYFRYKRQETRPYSIGLEQDETYIPPGESLRLIEQSQSSGSGSGLPLL VQRTIAKQIQMVKQI  
 GKGRYGEVWMGKWRGEKVAVKVFFTTEEASWFRETEIYQTVLMRHENILGFIAADIKGTGSWTQLYLITD  
 YHENGSLYDYLKSTTLDAK SMLKLAYSSVSGLCHLHTEIFSTQGKPAIAHRDLKSKNILVKKNGTCC IAD  
 LGLAVKFI SDTNEVDIPPNTRVGT KRYMPPEVLDESLNRNHFQSYIMADMY SFGLILWEVARRCVSGGIV  
 EEEYQLPYHDLVPSDPSYEDMREIVCIKKLRPSFPNRWSSDECLRQMGKLMTECWAHNPASRLTALRVKKT  
 LAKMSESQDIKL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mg3718\\_d01.zip](https://cdn.origene.com/chromatograms/mg3718_d01.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

**ACCN:** NM\_001203

**ORF Size:** 1506 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.

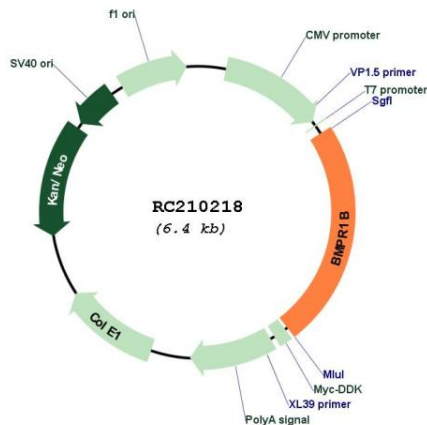
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

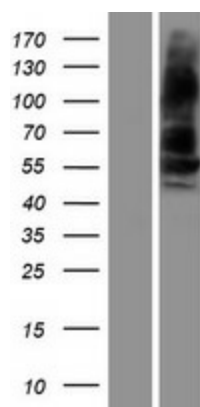
RefSeq:	<u>NM_001203.3</u>
RefSeq Size:	2032 bp
RefSeq ORF:	1509 bp
Locus ID:	658
UniProt ID:	<u>O00238</u>
Cytogenetics:	4q22.3
Domains:	Activin_recp, pkinase, TyrKc, S_TKc, GS
Protein Families:	Druggable Genome, Protein Kinase, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction, TGF-beta signaling pathway
MW:	56.93 kDa

**Gene Summary:** This gene encodes a member of the bone morphogenetic protein (BMP) receptor family of transmembrane serine/threonine kinases. The ligands of this receptor are BMPs, which are members of the TGF-beta superfamily. BMPs are involved in endochondral bone formation and embryogenesis. These proteins transduce their signals through the formation of heteromeric complexes of 2 different types of serine (threonine) kinase receptors: type I receptors of about 50-55 kD and type II receptors of about 70-80 kD. Type II receptors bind ligands in the absence of type I receptors, but they require their respective type I receptors for signaling, whereas type I receptors require their respective type II receptors for ligand binding. Mutations in this gene have been associated with primary pulmonary hypertension. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Feb 2012]

**Product images:**



Circular map for RC210218



Western blot validation of overexpression lysate (Cat# [LY420076]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210218 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).