

Product datasheet for **MR226598**

Bmpr2 (NM_007561) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bmpr2 (NM_007561) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bmpr2
Synonyms:	2610024H22Rik; AL117858; AW546137; BB189135; BM; BMP; BMP-; BMP-2; BMPR-2; BMPR-II; BMPRII; BRK-3; Gm20272
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR226598 representing NM_007561 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACTTCCTCGCTGCATCGGCCCTTCGGGTGCCCTGGCTGCTATGGGCCGTCCTGCTGGTCAGCACTA
CGGCTGCTTCTCAGAATCAAGAACGGCTGTGTGCATTTAAAGATCCATATCAACAAGATCTTGGGATAGG
TGAGAGTCGAATCTCTCATGAAAATGGGACAATATTATGTTCCAAAGGGAGCACGTGTTATGGTCTGTGG
GAGAAATCAAAGGGGACATCAATCTTGTGAAACAAGGATGTTGGTCTCACATCGGTGATCCCAAGAGT
GCCACTATGAAGAGTGTGTAGTAACACCACCCACCCTCAATTCAGAATGGAACGTACCGCTTTTGCTG
CTGTAGTACAGATTTATGTAATGTAACCTTTACTGAGAATTTCCACCCCTGACACAACACCCTCAGT
CCACCTCATTCTTAATCGAGATGAAACGATAATCATTGCTTTGGCATCAGTTTCTGTGTAGCTGTTT
TGATAGTCGCCTTATGTTTTGGATACAGAATGTTGACAGGAGACCGGAAACAGGGTCTTACAGCATGAA
CATGATGGAGGGCGCAGCAGCAGAGCCCTCCCTTGACCTGGATAACCTGAAGCTGCTGGAGCTGATTGGA
CGGGGTCGATACGGAGCAGTATATAAAGTTTCCTTGGATGAGCGTCCAGTTGCTGTAAGTATTTTCTT
TTGCAACCGTCAGAATTTATAAATGAAAAAACATTTACAGAGTGCCTTTGATGGAACATGACAACAT
TGCTCGCTTCATAGTTGGAGACGAGAGGCTCACTGCAGACGGCCGCATGGAGTATTTGCTTGTGATGGAG
TATTATCCCAATGGATCTCTGTGCAAAATCTGAGTCTCCACACAAGTATTGGGTAAGCTCTTGCCGTC
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CGCAATCTCCACCGAGATTTAAACAGCAGGAATGCTCTGGTAAAGAATGACGGCCGTGTTATCAGT
GACTTTGGTTTATCCATGAGGCTAACTGGAATCGGCTGGTGGCCAGGGGAAGAAGATAATCGCGCTA
TAAGTGAGGTTGGCACAATTCGCTATATGGCACCAGAAGTGCTAGAAGGAGCTGTGAACCTGAGGGACTG
TGAGTCAGCTCTGAAGCAAGTGGACATGTATGCGCTTGGACTCATCTACTGGGAGGTGTTTATGAGGTGT
ACAGACCTCTCCAGGTGAATCTGTACCAGATTACCAGATGGCTTTTCAGACAGAAGTTGGAACCATC
CCACATTTGAGGATATGCAGGTTCTTGTGTCCAGAGAGAAGCAGAGACCCAAGTCCAGAAGCCTGGAA



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AGAAAATAGCCTGGCAGTGAAGTCACTCAAGGAAACAATTGAAGACTGCTGGGACCAGGATGCAGAGGCT
 CCGCTCACTGCACAGTGTGCTGAGGAGAGGATGGCTGAACCTCATGATGATATGGGAGAGAAAAGTCTG
 TGAGCCCAACGGTCAACCAATGTCAACTGCTATGCAGAAATGAACGCAACCTGTCACATAATAGGCGTGT
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 CAAGGAAAGCTCTGATGAGAATCTCATGGAGCATTCTCTGAAGCAGTTCAGTGGGCCAGACCCATTGAGC
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 CACAGGCTGCAAAATGGGCAAGCATGTTTAAATCCTGATGTTCCACCTGCTCAGATCTATCCTCTCCCTAA
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 CTGATGAGCATGAACCTTACTGAGACGAGAGCAACAGGCTGGCCATGATGAAGGGGTTCTGGATCGTTT
 GGTAGATAGGAGGGAACGGCCATTAGAAGTGGCCGAACAAATCCAATAACAACAACAGCAATCCATGT
 TCAGAACAAGATATCCTTACACAAGGTGTTACAAGCACAGCTGCAGATCCTGGGCCATCAAAGCCAGAA
 GAGCACAGAGGCCAATCTCTGGATCTTTCAGCCACAATATCCTGGATGGCAGCAGTATACAGATAGG
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 CTTAAGCGGTGGCGCCCTCCACCTGGGTCACTCCACCGAGCCGCTGGACTGTGAGGTCAACAACAATG
 GCAGTGACAGGGCAGTCCATTCTAAATCTAGCACTGCTGTGTACCTTGCAGAGGGAGGCACTGCCACGAC
 CACAGTGTCTAAAGATATAGGAATGAATTGTCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR226598 representing NM_007561
 Red=Cloning site Green=Tags(s)

MTSSLHRPFRVPLWVLLVSTTAASQNQERLCAFKDPYQDLGIGESRISHENGTILCSKGSTCYGLW
 EKSKGDINLVKQGCWSHIGDPQECHYECCVTTTPPSIQNGTYRFCCCSTDL CNVNFTENFPDPTPLS
 PPHSFNRDETI I IALASVSVLAVLIVALCFGYRMLTGDRKQGLHSMNMMEAAAAPSLLDNLKLELIG
 RGRYGAVYKGS LDERPVAVKVFSFANRQNFINEKNIYRVPLMEHDNIARFIVGDERLTADGRMEYLLVME
 YYPNGSLCKYLSLHTSDWVSSCRLAHSVTRGLAYLHTELP RGDHYKPAISHRDLNSRNVLVKNDGACVIS
 DFGLSMRLTGNRLVRPGEEDNAAISEVGTIRYMAPEVLEGAVNLRDCESALKQVDMYALGLIYWEVFMRC
 TDLFPGESVPDYQMAFQTEVGNHPTFEDMQVLSREKQRPKFPEAWKENS LAVRSLKETIEDCWDQDAEA
 RLTAQCAERMAELMMIWERKSVSPTVNPMTAMQNERNL SHNRRVPKIGPYPDYSSSSYIEDSIHHTD
 SIVKNISSEHMSSTPLTIGEKNRNSINERQQAQARIPSPETS VTSLSLSTNTTTNTTGLTPSTGMTTIS
 EMPYPDETHLHATNVAQSIGPTPVCLQLTEEDLETNKLDPKEVDKNLKESSDENLMEHSLKQFSGPDPLS
 STSSSLLYPLIKLAVEVTGQDFQAANGQAQLIPDVPPAQIYPLPKQNLPKRPTSLPLNTKNSTKEPR
 LKFGNKHKSNLKQVETGVAKMNTINAAEPHVVTVMNGVAGRSHNVNSHAATTQYANGAVPAGQAANIVA
 HRSQEMLNQNF IGEDTRLNINSSPDEHEP LLRREQQAGHDEGLDRLVDRRERPLEGGRTNSNNNSNPC
 SEQDILTQGVSTAADPGPSKPRRAQRPNLSDL SATNILDGSSIQIGESTQDGKSGSGEIKRRVKTPYS
 LKRWRPSTWVISTEPLDCEVNNNGSDRAVHKSSTAVYLAEGGTATTTVSKDIGMNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9009_c01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_007561

ORF Size: 3114 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 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_007561.4](#), [NP_031587.1](#)

RefSeq Size: 3507 bp

RefSeq ORF: 3117 bp

Locus ID: 12168

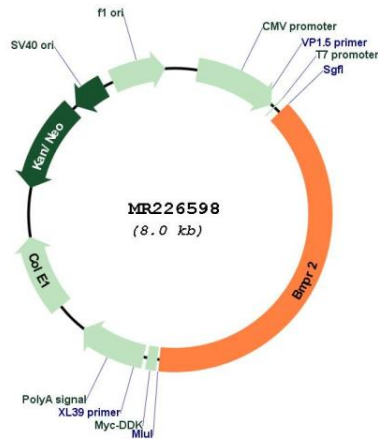
UniProt ID: [O35607](#)

Cytogenetics: 1 C2

MW: 115.5 kDa

Gene Summary: This gene encodes a serine/threonine kinase that functions as a receptor for bone morphogenetic proteins (BMPs). The encoded protein is a type II receptor that binds extracellular BMPs and forms a complex of two type II and two type I receptors at the cell membrane. This complex signals downstream to activate SMAD transcriptional regulators. This signaling is important during embryonic development. Mutations in this gene can cause pulmonary hypertension. [provided by RefSeq, Mar 2013]

Product images:



Circular map for MR226598