

Product datasheet for **MR227586**

Bmpr1a (NM_009758) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bmpr1a (NM_009758) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Bmpr1a
Synonyms:	1110037I22Rik; ALK3; AU045487; Bmpr; BMPR-IA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR227586 representing NM_009758
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACTCAGCTATACACTTACATCAGATTACTGGGAGCCTGTCTGTTTCATATTTCTCATGTTCAAGGGC
 AGAATCTAGATAGTATGCTCCATGGCACTGGTATGAAATCAGACTTGACCAGAAGAAGCCAGAAAATGG
 AGTGACTTTAGCACAGAGGATACCTTGCCCTTTCTTAAAGTGCTATTGCTCAGGACTGCCAGATGAT
 GCTATTAATAACACATGCATAACTAATGGCCATTGCTTTGCCATTATAGAAGAAGATGATCAGGGAGAAA
 CCACATTAACCTTCTGGGTGATGAAGTATGAAGGCTCTGATTTTCAATGCAAGGATTCACCGAAAGCCCA
 GCTACGCAGGACAATAGAATGTTGTCGGACCAATTTGTGCAACCAGTATTTGCAGCCTACACTGCCCCCT
 GTTGTTATAGGTCGTTCTTTGATGGCAGCATCCGATGGCTGGTGTGCTCATTCCATGGCTGTCTGTA
 TAGTTGCTATGATCATCTTCCAGCTGCTTTTGTATAAGCATTATTGTAAGAGTATCTCAAGCAGGGG
 TCGTTACAACCGTGATTTGGAACAGGATGAAGCATTATCCAGTAGGAGAAATCATTGAAAGACCTGATT
 GACCAGTCCCAAAGCTCTGGGAGTGGATCTGGATTGCCTTATTGGTTCAGCGAACTATTGCCAAACAGA
 TTCAGATGGTTCCGCAGGTTGGTAAAGGCCGCTATGGAGAAGTATGGATGGGTAATGGCGTGGTAAAA
 AGTGGCTGTCAAAGTGTTTTTACCCTGAAGAAGCTAGCTGGTTAGAGAAAACAGAAATCTACCAGACG
 GTGTTAATGCGTCATGAAAATACTTGGTTTTATAGTGCAGACATTAAGGCACTGGTTCCTGGACTC
 AGCTGATTTGATTACTGATTACCATGAAAATGGATCTCTCTATGACTTCCTGAAATGTGCCACACTAGA
 CACCAGAGCCCTACTCAAGTAGCTTATCTGCTGCTTGTGGTCTGTGCCACCTCCACACAGAAATTTAT
 GGTACCCAAGGGAAGCCTGCAATTGCTCATCGAGACCTGAAGACCAAAAACATCCTTATTAAGAAAAATG
 GAAGTGTCTGTATTGCTGACCTGGCCTAGCTGTTAAATCAACAGTGATACAAAATGAAGTTGACATACC
 CTTGAATACCAGGTGGGCACCAAGCGGTACATGGCTCCAGAAGTCTGGATGAAAGCCTGAATAAAAAAC
 CATTTCAGCCCTACATCATGGCTGACATCTATAGCTTTGGTTTGATCATTGGGAAATGGCTCGTCGTT
 GTATTACAGGAGGAATCGTGGAGGAATACAATTACCATATTACAACATGGTGCCAGTGACCCATCCTA
 TGAGGACATGCGTGAGGTTGTGTGTGTAACGCTTGGCGCAATCGTGTCTAACCGCTGGAACAGCGAT
 GAATGTCTTCGAGCAGTTTTGAAGCTAATGTCAGAATGTTGGGCCATAATCCAGCCTCCAGACTCACAG
 CTTTGAGAATCAAGAAGACTTGCAAAAATGTTGAATCCAGGATGTAAGATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR227586 representing NM_009758
 Red=Cloning site Green=Tags(s)

MTQLYTYIRLLGACLFIIISHVQGNLDSMLHGTGMKSDLQKPKPENGVTLPEDTLPFLKCYCSGHCPDD
 AINNTCITNGHCFAIIEEDDQGETTSLTSGCMKYEKSDQCKDSPKAQLRRTIECCRTNLCNQYLQPTLPP
 VVIGPFFDGSIRLWVLI SMAVCIVAMIIIFSSFCYKHYCKSISSRGRYNRDLEQDEAFIPVGESLKDLI
 DQSQSSGSGSGLPLL VQRTIAKQIQMVRQVKGGRYGEVWMGKWRGEKVAVKVFFTTTEEASWFRETEIYQT
 VLMRHENILGFIAADIKGTGSWTQLYLITDYHENGSLYDFLKCATLDTRALLKLAYSACGLCHLHTEIY
 GTQGKPAIAHRDLKSKNILIKKNGSCCIADLGLAVKFNSDTNEVDIPLNTRVGTKRYMAPEVLDLNLKN
 HFQPYIMADIYSFGLIIWEMARRCITGGIVEEYQLPYNYMVPSPSYEDMREVVCVKRLRPVSNRWNSD
 ECLRAVLKLMSECAHNPASRLTALRIKKTAKMVESQDVKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_009758

ORF Size: 1596 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_009758.4](#), [NP_033888.2](#)

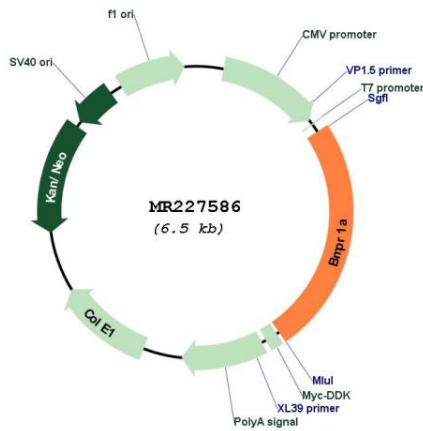
RefSeq Size: 5481 bp

RefSeq ORF: 1599 bp

Locus ID: 12166

UniProt ID: [P36895](#)
Cytogenetics: 14 20.81 cM
MW: 60.5 kDa
Gene Summary: On ligand binding, forms a receptor complex consisting of two type II and two type I transmembrane serine/threonine kinases. Type II receptors phosphorylate and activate type I receptors which autophosphorylate, then bind and activate SMAD transcriptional regulators. Receptor for BMP2, BMP4, GDF5 and GDF6. Positively regulates chondrocyte differentiation through GDF5 interaction (PubMed:24098149). Mediates induction of adipogenesis by GDF6 (PubMed:23527555).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR227586