

Product datasheet for **MG227586**

Bmpr1a (NM_009758) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Bmpr1a (NM_009758) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Bmpr1a
Synonyms:	1110037I22Rik; ALK3; AU045487; Bmpr; BMPR-IA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227586 representing NM_009758
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACTCAGCTATACACTTACATCAGATTACTGGGAGCCTGTCTGTTTCATATTTCTCATGTTCAAGGGC
 AGAATCTAGATAGTATGCTCCATGGCACTGGTATGAAATCAGACTTGGACCAGAAGAAGCCAGAAAATGG
 AGTGACTTTAGCACCAGAGGATACCTTGCCCTTTCTTAAAGTGCTATTGCTCAGGACTGCCAGATGAT
 GCTATTAATAACACATGCATAACTAATGGCCATTGCTTTGCCATTATAGAAGAAGATGATCAGGGAGAAA
 CCACATTAACCTTCTGGGTGATGAAGTATGAAGGCTCTGATTTTCAATGCAAGGATTCACCGAAAGCCCA
 GCTACGCAGGACAATAGAATGTTGTCGGACCAATTTGTGCAACCAGTATTTGCAGCCTACACTGCCCCCT
 GTTGTTATAGGTCGTTCTTTGATGGCAGCATCCGATGGCTGGTGTGCTCATTCCATGGCTGTCTGTA
 TAGTTGCTATGATCATCTTCTCCAGCTGCTTTTGTATAAGCATTATTGTAAGAGTATCTCAAGCAGGGG
 TCGTTACAACCGTGATTTGGAACAGGATGAAGCATTTATCCAGTAGGAGATCATTGAAAGACCTGATT
 GACCAGTCCCAAAGCTCTGGGAGTGGATCTGGATTGCCTTATTGGTTACAGCAACTATTGCCAAACAGA
 TTCAGATGGTTCCGCAGGTTGGTAAAGGCCGCTATGGAGAAGTATGGATGGGTAAATGGCGTGGTAAAA
 AGTGGCTGTCAAAGTGTTTTTACCCTGAAGAAGCTAGCTGGTTTAGAGAAACAGAAATCTACCAGACG
 GTGTTAATGCGTCATGAAAATACTTGGTTTTATAGTGCAGACATTAAGGCACTGGTTCCTGGACTC
 AGCTGATTTGATTACTGATTACCATGAAAATGGATCTCTCTATGACTTCCTGAAATGTGCCACACTAGA
 CACCAGAGCCCTACTCAAGTTAGCTTATTCTGCTGCTTGTGGTCTGTGCCACCTCCACACAGAAATTTAT
 GGTACCAAGGGAAGCCGCAATTGCTCATCGAGACCTGAAGACGCAAAAACATCCTTATTAAGAAAAATG
 GAAGTTGCTGTATTGCTGACCTGGCCCTAGCTGTTAAATCAACAGTGATACAAATGAAGTTGACATACC
 CTTGAATACCAGGTGGGCACCAAGCGGTACATGGCTCCAGAAGTCTGGATGAAAGCCTGAATAAAAAAC
 CATTTCAGCCCTACATCATGGCTGACATCTATAGCTTTGGTTTGATCATTGGGAAATGGCTCGTCGTT
 GTATTACAGGGAATCGTGGAGGAATCAATTACCATATTACAACATGGTGCCAGTGACCCATCCTA
 TGAGGACATGCGTGAGGTTGTGTGTGTAACGCTTGGCGCAATCGTGTCTAACCGCTGGAACAGCGAT
 GAATGTCTTCGAGCAGTTTTGAAGCTAATGTCAGAATGTTGGGCCATAATCCAGCCTCCAGACTCACAG
 CTTTGAGAATCAAGAAGACTTGCAAAAATGTTGAATCCAGGATGTAAGATT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG227586 representing NM_009758
 Red=Cloning site Green=Tags(s)

MTQLYTYIRLLGACLFIIISHVQGNLDSMLHGTGMKSDLQKKPENGVTLPEDTLPFLKCYCSGHCPDD
 AINNTCITNGHCFAIIEEDDQGETTLTSGCMKYEGRSDFQCKDSPKAQLRRTIECCRTNLCNQLQPTLPP
 VVIGPFFDGSIRWLVLISMAVICIVAMIIFFSSFCYKHYCKSISRRGRYNRDLEQDEAFIPVGESLKDLI
 DQSQSSGSGSGLPLLVRQTIQAKIQMVRQVKGGRYGEVWMGKWRGEKVAVKVFFFTTEEASWFRETEIYQT
 VLMRHENILGFIAADIKGTGSWTQLYLITDYHENGSLYDFLKCATLDTRALLKLAYSAAAGLCHLHTEIY
 GTQGKPAIAHRDLKSKNILIKKNGSCCIADLGLAVKFNSDTNEVDIPLNTRVGTKRYMAPEVLDLNLKN
 HFQPYIMADIYSFGLIIEWARRCITGGIVEEYQLPYNMPVSDPSYEDMREVVCVKRLRPIVSNRWNSD
 ECLRAVLKLMSECAWHPASRLTALRIKKTAKMVESQDVKI

TRTRPLE – GFP Tag – V

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.

RefSeq: [NM_009758.4](#), [NP_033888.2](#)

RefSeq Size: 5481 bp

RefSeq ORF: 1599 bp

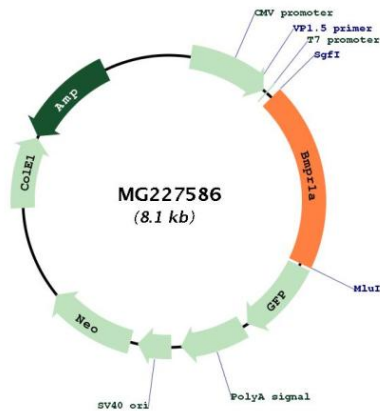
Locus ID: 12166

UniProt ID: [P36895](#)

Cytogenetics: 14 20.81 cM

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 MG227586