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Product datasheet for RC206048

BMPR1A (NM_004329) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMPR1A (NM_004329) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMPR1A
Synonyms:	10q23del; ACVRLK3; ALK3; CD292; SKR5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC206048 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCTCAGCTATACATTTACATCAGATTATTGGGAGCCTATTTGTTCATCATTTCTCGTGTTCAAGGAC
AGAATCTGGATAGTATGCTTCATGGCACTGGGATGAAATCAGACTCCGACCAGAAAAAGTCAGAAAATGG
AGTAACCTTAGCACCAGAGGATACCTTGCCTTTTTTAAAGTGCTATTGCTCAGGGCACTGTCCAGATGAT
GCTATTAATAACACATGCATAACTAATGGACATTGCTTTGCCATCATAGAAGAAGATGACCAGGGAGAAA
CCACATTAGCTTCAGGGTGTATGAAATATGAAGGATCTGATTTTCAGTGCAAAGATTCTCCAAAAGCCCA
GCTACGCCGGACAATAGAATGTTGTCGGACCAATTTATGTAACCAGTATTTGCAACCCACACTGCCCCCT
GTTGTCATAGGTCCGTTTTTTGATGGCAGCATTCGATGGCTGGTTTTGCTCATTTCTATGGCTGTCTGCA
TAATTGCTATGATCATCTTCTCCAGCTGCTTTTGTTACAAACATTATTGCAAGAGCATCTCAAGCAGACG
TCGTTACAATCGTGATTTGGAACAGGATGAAGCATTTATTCCAGTTGGAGAATCACTAAAAGACCTTATT
GACCAGTCACAAAGTTCTGGTAGTGGGTCTGGACTACCTTTATTGGTTCAGCGAACTATTGCCAAACAGA
TTCAGATGGTCCGGCAAGTTGGTAAAGGCCGATATGGAGAAGTATGGATGGGCAAATGGCGTGGCGAAAA
AGTGGCGGTGAAAGTATTCTTTACCACTGAAGAAGCCAGCTGGTTTCGAGAAACAGAAATCTACCAAACT
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CACCAGAGCCCTGCTTAAATTGGCTTATTCAGCTGCCTGTGGTCTGTGCCACCTGCACACAGAAATTTAT
GGCACCCAAGGAAAGCCCGCAATTGCTCATCGAGACCTAAAGAGCAAAAACATCCTCATCAAGAAAAATG
GGAGTTGCTGCATTGCTGACCTGGGCCTTGCTGTTAAATTCAACAGTGACACAAATGAAGTTGATGTGCC
CTTGAATACCAGGGTGGGCACCAAACGCTACATGGCTCCCGAAGTGCTGGACGAAAGCCTGAACAAAAAC
CACTTCCAGCCCTACATCATGGCTGACATCTACAGCTTCGGCCTAATCATTTGGGAGATGGCTCGTCGTT
GTATCACAGGAGGGATCGTGGAAGAATACCAATTGCCATATTACAACATGGTACCGAGTGATCCGTCATA
CGAAGATATGCGTGAGGTTGTGTGTGTCAAACGTTTGCGGCCAATTGTGTCTAATCGGTGGAACAGTGAT
GAATGTCTACGAGCAGTTTTGAAGCTAATGTCAGAATGCTGGGCCCACAATCCAGCCTCCAGACTCACAG
CATTGAGAATTAAGAAGACGCTTGCCAAGATGGTTGAATCCCAAGATGTAAAAATC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206048 protein sequence
Red=Cloning site Green=Tags(s)

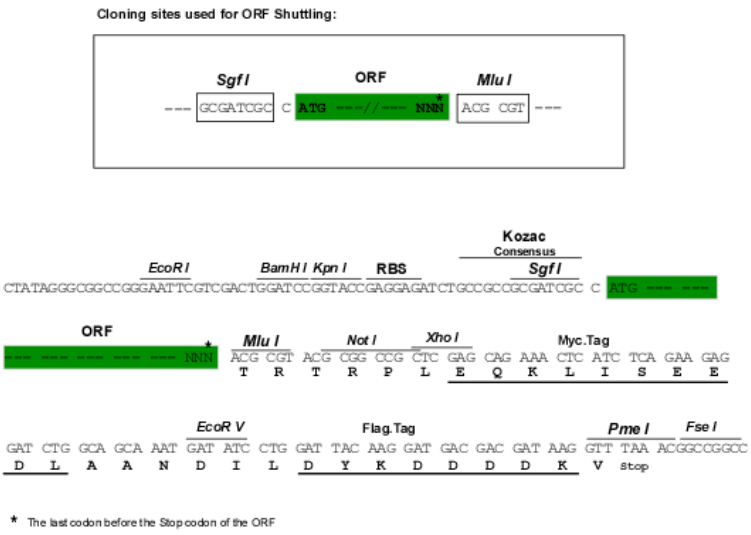
MPQLYIYIRLLGAYLFIISRVQGQNLDSMLHGTGMKSDSDQKKSENGVTLAPEDTLPFLKCYCSGHCPDD
AINNTCITNGHCFAIIEEDDQGETTLASGCMKYEGSDFQCKDSPKAQLRRTIECCRTNLCNQYLQPTLPP
VVIGPFFDGSIRWLVLLISMAVCIIAMIIFSSCFCYKHYCKSISSRRRYNRDLEQDEAFIPVGESLKDLI
DQSQSSGSGSGLPLLVQRTIAKQIQMVRQVGKGRYGEVWMGKWRGEKVAVKVFFTTEEASWFRETEIYQT
VLMRHENILGFIAADIKGTGSWTQLYLITDYHENGSLYDFLKCATLDTRALLKLAYSAACGLCHLHTEIY
GTQGKPAIAHRDLKSKNILIKKNGSCCIADLGLAVKFNSDTNEVDVPLNTRVGTKRYMAPEVLDESLNKN
HFQPYIMADIYSFGLIIWEMARRCITGGIVEEYQLPYYNMVPSDPSYEDMREVVCVKRLRPIVSNRWNSD
ECLRAVLKLMSECWAHNPASRLTALRIKKTLAKMVESQDVKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6072_b01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004329

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_004329.3

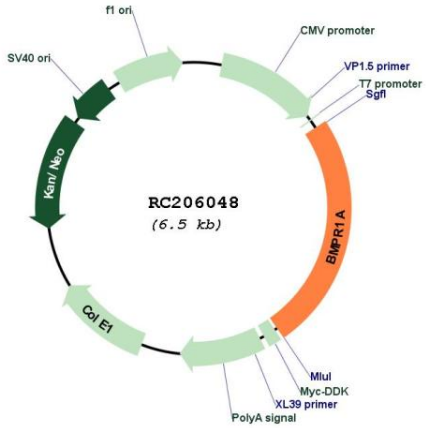
RefSeq Size: 3631 bp

RefSeq ORF: 1599 bp

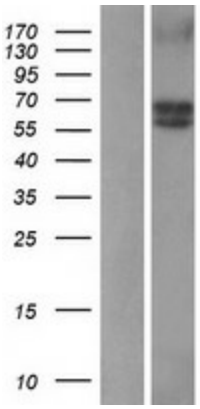
Locus ID: 657

UniProt ID:	P36894
Cytogenetics:	10q23.2
Domains:	Activin_recp, pkinase, TyrKc, S_TKc, GS
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction, TGF-beta signaling pathway
MW:	60.2 kDa
Gene Summary:	The bone morphogenetic protein (BMP) receptors are a family of transmembrane serine/threonine kinases that include the type I receptors BMPR1A and BMPR1B and the type II receptor BMPR2. These receptors are also closely related to the activin receptors, ACVR1 and ACVR2. The ligands of these receptors are members of the TGF-beta superfamily. TGF-betas and activins transduce their signals through the formation of heteromeric complexes with 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. [provided by RefSeq, Jul 2008]

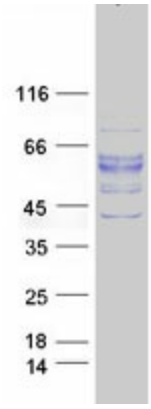
Product images:



Circular map for RC206048



Western blot validation of overexpression lysate (Cat# [LY418061]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206048 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BMPR1A protein (Cat# [TP306048]). The protein was produced from HEK293T cells transfected with BMPR1A cDNA clone (Cat# RC206048) using MegaTran 2.0 (Cat# [TT210002]).