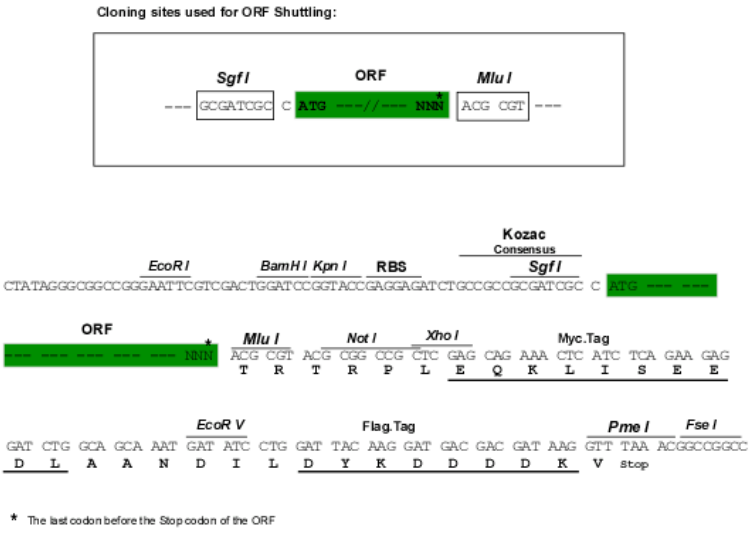
OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC204473

BMP4 (NM_001202) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BMP4 (NM_001202) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	BMP4
Synonyms:	BMP2B; BMP2B1; MCOPS6; OFC11; ZYME
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Chromatograms:	https://cdn.origene.com/chromatograms/mk6116_e05.zip
Restriction Sites:	SgfI-MluI
Cloning Scheme:	



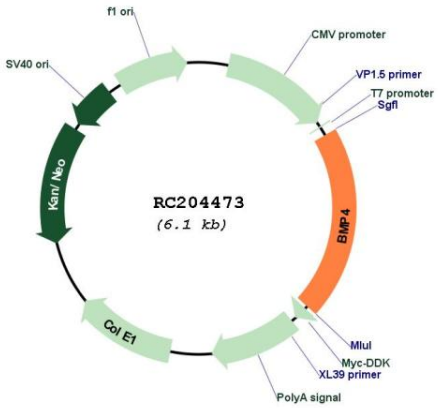
ACCN:	NM_001202
ORF Size:	1224 bp

View online »

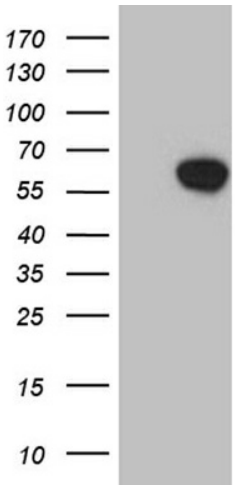
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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_001202.2, NP_001193.1
RefSeq Size:	1957 bp
RefSeq ORF:	1227 bp
Locus ID:	652
UniProt ID:	P12644
Cytogenetics:	14q22.2
Domains:	TGFb_propeptide, TGF-beta
Protein Families:	Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, Induced pluripotent stem cells, Secreted Protein, Stem cell relevant signaling - TGFb/BMP signaling pathway
Protein Pathways:	Basal cell carcinoma, Hedgehog signaling pathway, Pathways in cancer, TGF-beta signaling pathway
MW:	46.5 kDa

Gene Summary: This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein regulates heart development and adipogenesis. Mutations in this gene are associated with orofacial cleft and microphthalmia in human patients. The encoded protein may also be involved in the pathology of multiple cardiovascular diseases and human cancers. [provided by RefSeq, Jul 2016]

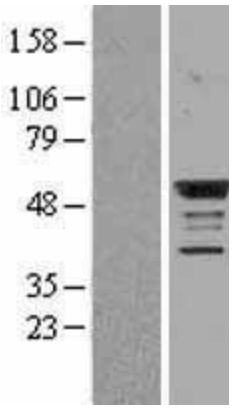
Product images:



Circular map for RC204473



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BMP4 (Cat# RC204473, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-BMP4(Cat# [TA803611]). Positive lysates [LY429051] (100ug) and [LC429051] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403337]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC219979] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).