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Product datasheet for RC211080

COMP (NM_000095) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COMP (NM_000095) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	COMP
Synonyms:	CTS2; EDM1; EPD1; MED; PSACH; THBS5; TSP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC211080 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTCCCCGACACCGCCTGCGTTCTTCTGCTCACCCTGGCTGCCCTCGGCGCGTCCGGACAGGGCCAGA
GCCCGTTGGGCTCAGACCTGGGCCCGCAGATGCTTCGGGAACTGCAGGAAACCAACGCGGCGCTGCAGGA
CGTGCGGGAGCTGCTGCGGCAGCAGGTCAGGGAGATCACGTTCCTGAAAAACACGGTGATGGAGTGTGAC
GCGTGCGGGATGCAGCAGTCAGTACGCACCGGCCTACCCAGCGTGCGGCCCCTGCTCCACTGCGCGCCCG
GCTTCTGCTTCCCCGGCGTGGCCTGCATCCAGACGGAGAGCGGCGCGCGCTGCGGCCCCTGCCCCGCGGG
CTTCACGGGCAACGGCTCGCACTGCACCGACGTCAACGAGTGCAACGCCCACCCCTGCTTCCCCCGAGTC
CGCTGTATCAACACCAGCCCGGGGTTCCGCTGCGAGGCTTGCCCGCCGGGGTACAGCGGCCCCACCCACC
AGGGCGTGGGGCTGGCTTTCGCCAAGGCCAACAAGCAGGTTTGCACGGACATCAACGAGTGTGAGACCGG
GCAACATAACTGCGTCCCCAACTCCGTGTGCATCAACACCCGGGGCTCCTTCCAGTGCGGCCCGTGCCAG
CCCGGCTTCGTGGGCGACCAGGCGTCCGGCTGCCAGCGGCGCGCACAGCGCTTCTGCCCCGACGGCTCGC
CCAGCGAGTGCCACGAGCATGCAGACTGCGTCCTAGAGCGCGATGGCTCGCGGTCGTGCGTGTGTGCCGT
TGGCTGGGCCGGCAACGGGATCCTCTGTGGTCGCGACACTGACCTAGACGGCTTCCCGGACGAGAAGCTG
CGCTGCCCGGAGCGCCAGTGCCGTAAGGACAACTGCGTGACTGTGCCCAACTCAGGGCAGGAGGATGTGG
ACCGCGATGGCATCGGAGACGCCTGCGATCCGGATGCCGACGGGGACGGGGTCCCCAATGAAAAGGACAA
CTGCCCGCTGGTGCGGAACCCAGACCAGCGCAACACGGACGAGGACAAGTGGGGCGATGCGTGCGACAAC
TGCCGGTCCCAGAAGAACGACGACCAAAAGGACACAGACCAGGACGGCCGGGGCGATGCGTGCGACGACG
ACATCGACGGCGACCGGATCCGCAACCAGGCCGACAACTGCCCTAGGGTACCCAACTCAGACCAGAAGGA
CAGTGATGGCGATGGTATAGGGGATGCCTGTGACAACTGTCCCCAGAAGAGCAACCCGGATCAGGCGGAT
GTGGACCACGACTTTGTGGGAGATGCTTGTGACAGCGATCAAGACCAGGATGGAGACGGACATCAGGACT
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TAGACAAGATCGACGTGTGTCCGGAGAACGCTGAAGTCACGCTCACCGACTTCAGGGCCTTCCAGACAGT
CGTGCTGGACCCGGAGGGTGACGCGCAGATTGACCCCAACTGGGTGGTGCTCAACCAGGGAAGGGAGATC
GTGCAGACAATGAACAGCGACCCAGGCCTGGCTGTGGGTTACACTGCCTTCAATGGCGTGGACTTCGAGG
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CAGCTTCTACGTGGTCATGTGGAAGCAGATGGAGCAAACGTATTGGCAGGCGAACCCCTTCCGTGCTGTG
GCCGAGCCTGGCATCCAACTCAAGGCTGTGAAGTCTTCCACAGGCCCCGGGGAACAGCTGCGGAACGCTC
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GAGGGCCCTGAGCTGGTGGCCGACAGCAACGTGGTCTTGGACACAACCATGCGGGGTGGCCGCCTGGGGG
TCTTCTGCTTCTCCCAGGAGAACATCATCTGGGCCAACCTGCGTTACCGCTGCAATGACACCATCCCAGA
GGACTATGAGACCCATCAGCTGCGGCAAGCC

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC211080 protein sequence
Red=Cloning site Green=Tags(s)

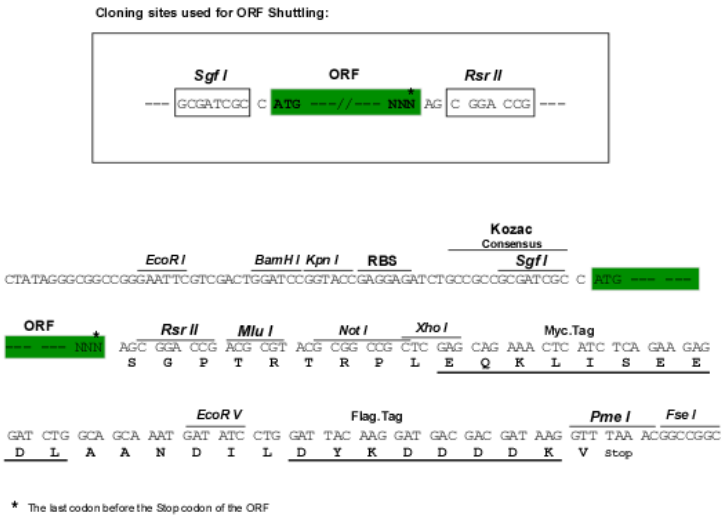
MVPDTACVLLLTLAALGASGQGQSPLGSDLGPQMLRELQETNAALQDVRELLRQQVREITFLKNTVMECD
ACGMQQSVRTGLPSVRPLLHCAPGFCFPGVACIQTESGARCGPCPAGFTGNGSHCTDVNECNAHPCFPRV
RCINTSPGFRCEACPPGYSGPTHQGVGLAFAKANKQVCTDINECETGQHNCVPNSVCINTRGSFQCGPCQ
PGFVGDQASGCQRRAQRFCPDGSPSECHEHADCVLERDGSRSCVCAVGWAGNGILCGRDTDLDGFPDEKL
RCPERQCRKDNCVTVPNSGQEDVDRDGIGDACDPDADGDGVPNEKDNCPLVRNPDQRNTDEDKWGDACDN
CRSQKNDDQKDTDQDGRGDACDDDIDGDRIRNQADNCPRVPNSDQKDSDGDGIGDACDNCPQKSNPDQAD
VDHDFVGDACDSDQDQDGDGHQDSRDNCPTVPNSAQEDSDHDGQGDACDDDDDNDGVPDSRDNCRLVPNP
GQEDADRDGVGDVCQDDFDADKVVDKIDVCPENAEVTLTDFRAFQTVVLDPEGDAQIDPNWVVLNQGREI
VQTMNSDPGLAVGYTAFNGVDFEGTFHVNTVTDDDYAGFIFGYQDSSSFYVVMWKQMEQTYWQANPFRAV
AEPGIQLKAVKSSTGPGEQLRNALWHTGDTESQVRLLWKDPRNVGWKDKKSYRWFLQHRPQVGYIRVRFY
EGPELVADSNVVLDTTMRGGRLGVFCFSQENIIWANLRYRCNDTIPEDYETHQLRQA

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6624_a05.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:



ACCN: NM_000095

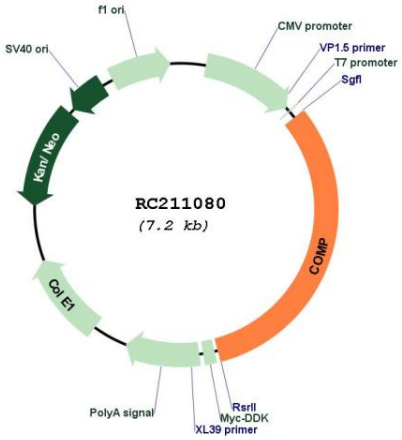
ORF Size: 2271 bp

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

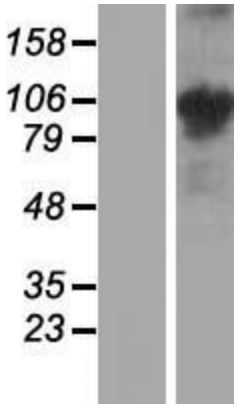
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_000095.3
RefSeq Size:	2471 bp
RefSeq ORF:	2274 bp
Locus ID:	1311
UniProt ID:	P49747
Cytogenetics:	19p13.11
Domains:	EGF_CA, tsp_3, EGF, EGF
Protein Families:	Druggable Genome, Secreted Protein
Protein Pathways:	ECM-receptor interaction, Focal adhesion, TGF-beta signaling pathway
MW:	82.9 kDa
Gene Summary:	The protein encoded by this gene is a noncollagenous extracellular matrix (ECM) protein. It consists of five identical glycoprotein subunits, each with EGF-like and calcium-binding (thrombospondin-like) domains. Oligomerization results from formation of a five-stranded coiled coil and disulfides. Binding to other ECM proteins such as collagen appears to depend on divalent cations. Contraction or expansion of a 5 aa aspartate repeat and other mutations can cause pseudochondroplasia (PSACH) and multiple epiphyseal dysplasia (MED). [provided by RefSeq, Jul 2016]

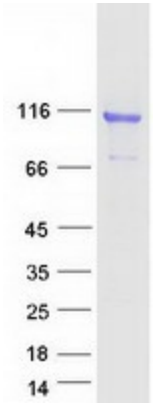
Product images:



Circular map for RC211080



Western blot validation of overexpression lysate (Cat# [LY424929]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC211080 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COMP protein (Cat# [TP311080]). The protein was produced from HEK293T cells transfected with COMP cDNA clone (Cat# RC211080) using MegaTran 2.0 (Cat# [TT210002]).