

Product datasheet for **RC208864**

Vitamin D Binding protein (GC) (NM_000583) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Vitamin D Binding protein (GC) (NM_000583) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Vitamin D Binding protein
Synonyms:	DBP; DBP-maf; DBP/GC; Gc-MAF; GcMAF; GRD3; HEL-S-51; VDB; VDBG; VDBP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC208864 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGAAGAGGGTCCTGGTACTACTGCTTGTGTGGCATTGGACATGCTTTAGAGAGAGGCCGGGATTATG
 AAAAGAATAAAGTCTGCAAGGAATTCTCCCATCTGGGAAAGGAGGACTTCACATCTCTGCTACTAGTCCT
 GTACAGTAGAAAAATTTCCAGTGGCAGCTTTGAACAGGTGAGCAACTTGTGAAGGAAGTTGTCTCCTTG
 ACCGAAGCCTGTGTGCGGAAGGGGCTGACCTGACTGCTATGACACCAGGACCTCAGCACTGTCTGCCA
 AGTCCTGTGAAAGTAATTCTCCATTCGCCGTTACCCAGGCACTGCTGAGTGTGCACCAAGAGGGCCT
 GGAACGAAAGCTCTGCATGGCTGCTGAAACACCAGCCACAGGAATTCCTACCTACGTGGAACCCACA
 AATGATGAAATCTGTGAGGCGTTCAGGAAAGATCCAAAGGAATATGCTAATCAATTTATGTGGGAATATT
 CCACTAATTACGACAAGCTCCTCTGCTACTTTTAGTCAGTTACACCAAGAGTTATCTTTCTATGGTAGG
 GTCCTGCTGTACCTCTGCAAGCCCACTGTATGCTTTTTGAAAGAGAGACTCCAGCTTAAACATTTATCA
 TTCTCACCACCTCTGCAATAGAGTCTGCTCACAATATGCTGCTTATGGGGAGAAGAAATCAAGGCTCA
 GCAATCTCATAAAGTTAGCCCAAAAAGTGCCTACTGCTGATCTGGAGGATGTTTTGCCACTAGCTGAAGA
 TATTACTAACATCCTCTCCAAATGCTGTGAGTCTGCCTCTGAAGATTGCATGGCCAAAGAGCTGCCTGAA
 CACACAGTAAACTCTGTGACAATTTATCCACAAAGAAATCTAAGTTTGAAGACTGTTGTCAAGAAAAAA
 CAGCCATGGACGTTTTTGTGTGCACTTACTTATGCCAGCTGCCCACTCCCGAGCTTCCAGATGTAGA
 GTTGCCCAACAACAAAGATGTGTGTGATCCAGGAAACACCAAAGTCATGGATAAGTATACATTTGAACTA
 AGCAGAAGGACTCATCTCCGGAAGTATTCCTCAGTAAGTACTTGAGCCAACCCATAAAGCCTTGGTG
 AATGCTGTGATGTTGAAGACTCAACTACTGTTTTAATGCTAAGGGCCCTCTACTAAAGAAGGAATATC
 TTCTTTTATTGACAAGGGACAAGAATAATGTCAGATTATTCAGAAAATACATTTACTGAGTACAAGAAA
 AAAGTGGCAGAGCGACTAAAAGCAAAATTCCTGATGCCACCCACGGAAGTGGCAAAGCTGGTTAAACA
 AGCGCTCAGACTTTGCCTCCAAGTCTGTTCCATAAACTCACCTCCTTTACTGTATTGAGAGATTGA
 TGCTGAATTGAAGAATATCCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC208864 protein sequence
 Red=Cloning site Green=Tags(s)

MKRVLVLLAVAFGHALERGRDYENKVKCKEFSHLGKEDFTSLSLVLYSRKFPSPGTFEQVSQLVKEVVSL
 TEACCAEGADPDCYDTRTSALSAKSCSNPFPVHPGTAECCTKEGLERKLCMAALKHQPEFPTYVEPT
 NDEICEAFRKDPKEYANQFMWEYSTNYGQAPLSLLVSYTKSYLSMVGSCCTSASPTVCFLKERLQKHL
 LLTTLNVRVCSQYAAAYGEKKSRLSNLIKLAQKVPTADLEDVPLAEDITNILSKCESASEDCMAKELPE
 HTVKLCDNLSTKNSKFEDCCQEKTAMDVFVCTYFMPAAQLPELDPVELPTNKDVCDPGNTKVMKYTFEL
 SRRTHLPEVFLSKVLEPTLKSLGECDDVEDSTTCFNAKGPLLKELSSFIDKGQELCADYSENTFTEYKK
 KLAERLKAKLDPATPELAKLVNKRSDFASNCCSINSPPLYCDSEIDAELKNIL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6178_c06.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_000583

ORF Size: 1422 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_000583.4](#)

RefSeq Size: 2024 bp

RefSeq ORF: 1425 bp

Locus ID: 2638

UniProt ID: [P02774](#)

Cytogenetics: 4q13.3

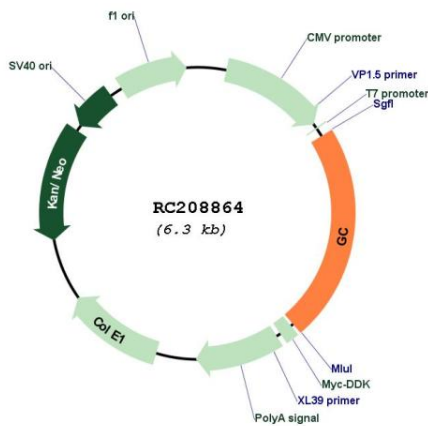
Domains: ALBUMIN

Protein Families: Secreted Protein

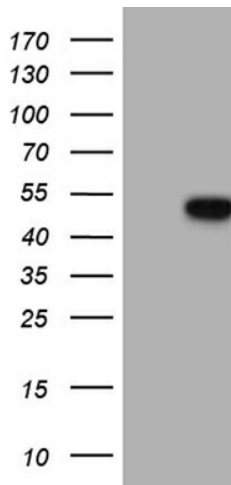
MW: 52.9 kDa

Gene Summary: The protein encoded by this gene belongs to the albumin gene family. It is a multifunctional protein found in plasma, ascitic fluid, cerebrospinal fluid and on the surface of many cell types. It binds to vitamin D and its plasma metabolites and transports them to target tissues. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Feb 2011]

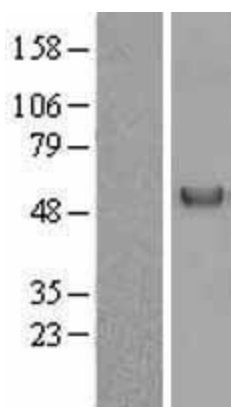
Product images:



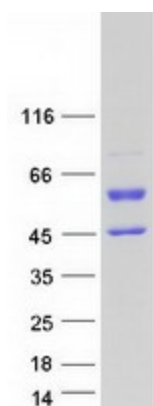
Circular map for RC208864



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GC (Cat# RC208864, 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-GC (Cat# [TA809264])(1:2000). Positive lysates [LY400197] (100ug) and [LC400197] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400197]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208864 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GC protein (Cat# [TP308864]). The protein was produced from HEK293T cells transfected with GC cDNA clone (Cat# RC208864) using MegaTran 2.0 (Cat# [TT210002]).