

## Product datasheet for RC228691

### Versican (VCAN) (NM\_001164098) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Versican (VCAN) (NM_001164098) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	VCAN
Synonyms:	CSPG2; ERVR; GHAP; PG-M; WGN; WGN1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC228691 representing NM_001164098 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTTCATAAATATAAAGAGCATCTTATGGATGTGTTCAACCTTAATAGTAACCCATGCGCTACATAAAG  
TCAAAGTGGGAAAAGCCACCGGTGAGGGCTCCCTCTCTGGAAAAGTCAGCCTACCTTGTCATTTTTTC  
AACGATGCCTACTTTGCCACCCAGTTACAACACCAGTGAATTTCTCCGCATCAAATGGTCTAAGATTGAA  
GTGGACAAAAATGAAAAGATTTGAAAAGAGACTACTGTCCTTGTGGCCAAAATGAAAATATCAAGATTG  
GTCAGGACTACAAGGGAGAGTGTCTGTGCCACACATCCCGAGGCTGTGGGCGATGCCTCCCTCACTGT  
GGTCAAGCTGCTGGCAAGTGATGCGGGTCTTTACCGCTGTGACGTGATGACGGATTGAAGACACACAA  
GACACGGTGTCACTGACTGTGGATGGGGTTGTGTTTCACTACAGGGCGGCAACCAGCAGGTACACACTGA  
ATTTTGAGGCTGCTCAGAAGGCTTGTGGACGTTGGGGCAGTCATAGCAACTCCAGAGCAGCTCTTTGC  
TGCCTATGAAGATGGATTTGAGCAGTGTGACGCAGGCTGGCTGGCTGATCAGACTGTCAGATATCCCATC  
CGGGCTCCAGAGTAGGCTGTTATGGAGATAAGATGGGAAAGGCAGGAGTCAGGACTTATGGATCCGTT  
CTCCCCAGGAACTTACGATGTGTTATGTTATGTGGATCATCTGGATGGTGTGTTCCACCTCACTGT  
CCCCAGTAAATTCACCTTCGAGGAGGCTGCAAAAAGAGTGTGAAAACCAGGATGCCAGGCTGGCAACAGTG  
GGGAACTCCAGGCGCATGGAGGAACGGCTTTGACCAGTGCGATTACGGGTGGCTGTGGATGCCAGCG  
TGCGCCACCCTGTGACTGTGGCCAGGGCCAGTGTGGAGTGGTCTACTTGGGGTGAAGACCCTGTATCG  
TTTTGAGAACCAGACAGGCTTCCCTCCCTGATAGCAGATTTGATGCCTACTGCTTTAAACCTAAAGAG  
GCTACAACCATCGATTTGAGTATCCTCGCAGAACTGCATCACCCAGTTTATCCAAAGAACCACAAATGG  
TTTCTGATAGAATAACCAATCATCCCTTTAGTTGATGAATTACCTGTCATTCCAACAGAGTCCCTCC  
CGTGGGAAATATTGTCAGTTTTGAACAGAAAGCCACAGTCCAACCTCAGGCTATCACAGATAGTTTAGCC  
ACCAAATTACCCACACCTACTGGCAGTACCAAGAAGCCCTGGGATATGGATGACTACTCACCTTCTGCTT  
CAGGACCTCTGGAAAGCTAGACATATCAGAAATTAAGGAAGAAGTGTCCAGAGTACAACCTGGCGTCTC  
TCATTATGCTACGGATTCATGGGATGGTGTGCTGGAAGATAAACAAACACAAGAATCGGTTACACAGATT  
GAACAAATAGAAGTGGTCTTTGGTAACATCTATGAAATCTTAAAGCACATTCCTTCCAAGGAATTCC



[View online >](#)

CTGTAAC TGAAC ACCATTGGTAACTGCAAGAATGATCCTGGAATCCAAAAC TGAAGAAAATGGTAAAG  
CACTGTTTCTGAATTGGTAACCAAGGTCACACTATGGATTCACCTGGGAGAGAGGATGATGAAGACAGA  
ACACTTACAGTTGGATCTGATGAGAGCACCTTGATCTTTGACCAAATTCCTGAAGTCATTACGGTGTCAA  
AGACTTCAGAAGACCACTCCACACTCATTAGAAGACTTGGAGTCAGTCTCAGCATCCACAACCTGTTTC  
CCCTTTAATTATGCCTGATAATAATGGATCATCCATGGATGACTGGGAAGAGAGACAAAAC TAGTGGTAGG  
ATAACGGAAAGAGTTTCTGGCAAATATCTGTCTACTACACCTTTCCATCACAGCATCGTACAGAAATAG  
AATTGTTTCCTTATTCTGGTGATAAAAATTAGTAGAGGGAATTTCCACAGTTATTTATCCTTCTCTACA  
AACAGAAAATGACACATAGAAGAGAAAGAACAGAAACACTAATACCAGAGATGAGAACAGATACTTATACA  
GATGAAATACAAGAAGAGATCACTAAAAGTCCATTTATGGGAAAAACAGAAGAAGAGTCTTCTCTGGGA  
TGAACCTCTACATCTCTCAGAGCCAATTCATGTTACAGAGTCTTCTGTGGAATGACCAAGTCTTT  
TGATTTCCCAACATTGATAACAAAGTAAAGTGCAGAGCCAACAGAAGTAAGAGATATGGAGGAAGACTTT  
ACAGCAACTCCAGGTAACAAAATATGATGAAAAATTACAACAGTGCCTTTGGCCCATGGTACTTTAA  
GTGTTGAAGCAGCCACTGTATCAAAATGGTCATGGGATGAAGATAATACAACATCCAAGCCTTTAGAGTC  
TACAGAACCTTCAGCCTTTCAAATGGCCCCCTGCCTACTCACAACCTGTGGGGATGAATGGAAGGAT  
AAAGACATCCCAAGTTTCTACTGAAGATGGAGCAGATGAATTTACTCTTATCCAGATAGTACTCAAAGC  
AGTTAGAGGAGGTTACTGATGAAGACATAGCAGCCATGGAAAATTCACAATTAGATTTACAGCCAAC TAC  
ATCAACTGGTATTGCAGAAAAGTCAACTTTGAGAGATTCTACAAC TGAAGAAAAAGTTCACCTATCACA  
AGCACTGAAGGCCAAGTTATGCAACCATGGAAGGAAGTCTTTGGGTGAAGTAGAAGATGTGGACCTCT  
CTAAGCCAGTATCTACTGTTCCCAATTTGCACACACTTCAGAGGTGGAAGGATTAGCATTGTGTTAGTTA  
TAGTAGCACCCAAGAGCCTACTACTTATGTAGACTCTCCCATACCATTCTCTTCTGTAAATCCCAAG  
ACAGACTGGGGAGTGTAGTACCTTCTGTTCCATCAGAAGATGAAGTCTAGGTGAACCTCTCAAGACA  
TACTTGTCAATTGATCAGACTCGCCTTGAAGCGACTATTTCTCCAGAACTATGAGAACAACAAAAATCAC  
AGAGGGAACAAC TCAAGAAAGTCCCTTGGAAAGAACAGACTGCAGAGAAACCAAGTTCCTGCTCACTG  
TCTACAGCTTGGACTCCCAAGGAGGCAGTAACACCACTGGATGAACAAGAGGGCGATGGATCAGCATATA  
CAGTCTCTGAAGATGAATTGTTGACAGGTTCTGAGAGGTTCCAGTTTTAGAAAACACTCCAGTTGGAAA  
AATTGATCACAGTGTGTCTATCCACCAGGTGCTGTAAC TGAAGCACAAGTGAAGAACAGATGAAGTGGTA  
ACACTAACACCACGATTGGGCCAAAAGTATCTTTAAGTCCAGGGCCTGAACAAAAATGAAAACAGAAG  
GTAGTAGTACAACAGGATTTACATCATCTTTGAGTCTTTTAGTACCCACATTACCCAGCTTATGGAAGA  
AACCCTACTGAGAAAACATCCCTAGAGGATATTGATTTAGGCTCAGGATTTTGAAGCCCAAGCC  
ACAGAACTCATAGAATTTCAACAATCAAAGTCAAGTCCAAGTATATTACCCTGCCTTCAGTTCAG  
TAGACAGACTTCACACAACCTTCAGCATTCAAGCCATCTTCGCGATCACTAAGAAACCACTCTCATCGA  
CAGGGAACCTGGTGAAGAAACAACCAAGTACATGGTAATCATTGGAGAATCAACATCTCATGTTCCCTCC  
ACTACCCTTGAAGATATTGTAGCCAAGGAAACAGAAACCGATATTGATAGAGAGTATTTACGACTTCAA  
GTCCTCTGCTACACAGCCAACAAGACCACCACTGTGGAAGACAAGAGGCCTTTGGACCTCAGGCGCT  
TTCTACGCCACAGCCCCAGCAAGCACAATAATCACCCTGACATTAATGTTTATATTATTGAGGTCAGA  
GAAAATAAGACAGGACCTGATCGCTGCAAAATGAACCCGTGCCTTAACGGAGGCACCTGTTATCCTACTG  
AAACTTCTACGTATGCACCTGTGTGCCAGGATACAGCGGAGACCAGTGTGAAC TTTGATGAATG  
TCACTCTAATCCCTGTGTAATGGAGCCACTTGTGTTGATGGTTTTAACACATTCAGGTGCCTCTGCCTT  
CCAAGTTATGTTGGTGCCTTTGTGAGCAAGATACCGAGACATGTGACTATGGCTGGCACAATAATCCAAG  
GGCAGTGCTACAATACTTTGCCATCGACGCACATGGGATGCAGCTGAACGGGAATGCCCTGCAGGG  
TGCCATCTCACAAAGCATCCTGTCTCACGAAGAACAATGTTTGTAAATCGTGTGGGCCATGATTATCAG  
TGGATAGGCCCTCAATGACAAGATGTTTGTGAGCATGACTTCCGTTGGACTGATGGCAGCACACTGCAATACG  
AGAATTGGAGACCCAACCAGCCAGACAGCTTCTTTCTGCTGGAGAAGACTGTGTTGTAATCATTGGCA  
TGAGAATGGCCAGTGAATGATGTTCCCTGCAATTACCATCTCACCTATACGTGCAAGAAAGGAACAGTC  
GCTTGGCGCCAGCCCCCTGTTGTAGAAAATGCCAAGACCTTTGAAAGATGAAACCTCGTTATGAAATCA  
ACTCCCTGATTAGATACCACTGCAAAGATGGTTTCATTCAACGTACCTTCCAAC TATCCGGTCTTAGG  
AAATGGAAGATGGGCTATACCTAAAATTACCTGCATGAACCCATCTGCATACCAAAGGACTTATTCTATG  
AAATACTTTAAAATTCCTCATCAGCAAAGACAATTCAATAAATACATCCAACATGATCATCGTTGGA  
GCCGGAGGTGGCAGGAGTCGAGGCGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC228691 representing NM\_001164098  
 Red=Cloning site Green=Tags(s)

MFINKSILWMCSTLIVTHALHKVKVKGKSPVVRGSLSGKVSLPCHFSTMPPLPPSYNTSEFLRIKWSKIE  
 VDKNGKDLKETTTLVAQNGNIKIGQDYKGRVSVPTHEAVGDASLTVVKKLASDAGLYRCDVMYGIEDTQ  
 DTVSLTVDGVVFHYRAATSRYYTLNFEAAQKACLVDGAVIATPEQLFAAYEDGFEQCDAGWLADQTVRYPI  
 RAPRVGCGYDKMGKAGVRTYGFRRSPQETVDVYCVVDHLDGVDVHFLTVPSKFTFEEAAKECENQDARLATV  
 GELQAARNGFDQCDYGLSDASVRHPVTVARAQCAGGLLVGRTLYRFENQTFGPPPSRFDAYCFKPKKE  
 ATTIDLILAETASPSLSKEPQMVSDRTPPIPLVDELPIVTEFPVGNIVSFEQKATVQPQAITDSLAK  
 TKLPTPTGSTKKPDMDDYSPSASGGLGLDISEIKEEVLQSTTGVSHTYATDSWDGVVEDKQTQESVTQI  
 EQIEVGPLVTSMEILKHIPSKEFPVTETPLVTARMILESKTEKKMVSTVSELVTTGHYGFLLGEEDDED  
 TLTVGSDESTLIFDQIPEVITVSKTSEDITHLEDLESVSASTVSPLIMPDNNGSSMDWEERQTSGR  
 ITEEFLGKYLSTPPFSQHRTEIELFPYSGDKILVEGISTVIYPSLQTEMTHRRERTETLIPEMRTDYYT  
 DEIQEEITKSPFMGKTEEEVFSGMKLSTLSEPIHVTESSEVMTKSFDFPTLITKLSAEPTEVRDMEEDF  
 TATPGTTKYDENITTVLLAHGTLVVEAATVSKSWDEDNTTSKPLESTEPSASSKLPALLTTVGMNGKD  
 KDIPSFTEDGADEFLLIPDSTQKQLEEVDEDEIAAHGKFTIRFQPTTSTGIAEKSTLRDSTTEEKVPPIT  
 STEGQVYATMEGSALGEVEDVLSKPVSTVPQFAHTSEVEGLAFVYSSTQEPPTYVDSSTHPIPLSVIPK  
 TDWGVLVPSVPEDEVLEGEPSQDILVIDQTRLEATISPETMRRTKITEGTTQEEFPWKEQTAEKVPVLS  
 STAWTPKEAVTPLDEQEGDGSAYTVSEDELLTGSERVPVLETPVVKIDHSVSYPPGAVTEHKVKTDEVV  
 TLTPIRIGPKVSLSPGPEQKYETEGSSTTGFTSSLSPFSTHITQLMEETTEKTSLEDIDLGSLFEKPKA  
 TELIEFSTIKVTVPDITTAFASSVDRLHTTSFAKPSAITKKPPLIDREPGEETSDMVIIGESTSHVPP  
 TTLEDIVAKETEIDIREYFTTSSPPATQPTRPPTVEDKEAFGPQALSTPQPPASTKFHPDINVYIEVR  
 ENKTGPDRCKMNPCLNGGTCYPTETSYVCTCVPGYSGDQCELDLDFDECHSNPCRNAGATCVDFNTFRCLCL  
 PSYVVALCEQDTECDYGWHKFGQCYKYFAHRRTWDAARECRLOGAHLTSLSHEEQMFINVRVGHDIYQ  
 WIGLNDKMFHDFRWTDGSLQYENWRPNQPSFFSAGEDCVVIWHENGQWNVPCNYHLTYTCKKGTV  
 ACGQPPVVENAKTFGKMKPRYEINSLIRYHCKDGFIRHLPTIRCLGNRWAIPKITCMNPSAYQRTYSM  
 KYFKNSSAKDNSINTSKHHRWSRRWQESRR

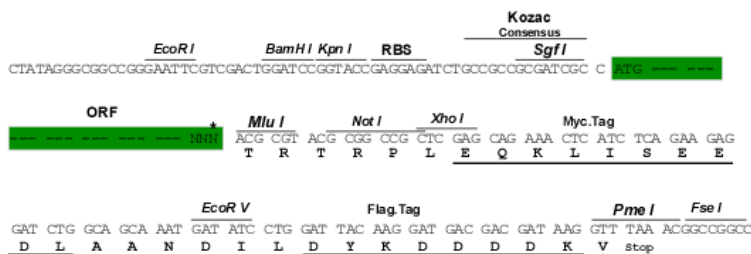
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

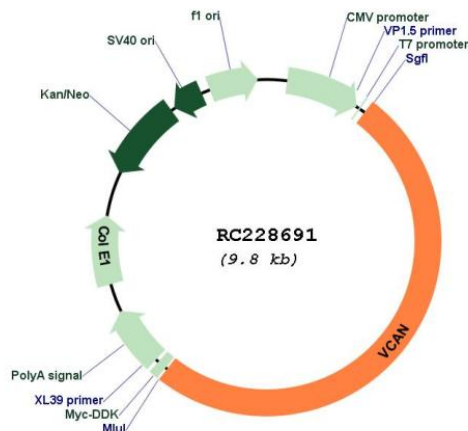
Cloning Scheme:

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

## Plasmid Map:



ACCN: NM\_001164098

ORF Size: 4926 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\\_001164098.1](#), [NP\\_001157570.1](#)

RefSeq ORF: 4929 bp

Locus ID: 1462

UniProt ID:	<a href="#">P13611</a>
Cytogenetics:	5q14.2-q14.3
Protein Pathways:	Cell adhesion molecules (CAMs)
MW:	182.06 kDa
Gene Summary:	<p>This gene is a member of the aggrecan/versican proteoglycan family. The protein encoded is a large chondroitin sulfate proteoglycan and is a major component of the extracellular matrix. This protein is involved in cell adhesion, proliferation, proliferation, migration and angiogenesis and plays a central role in tissue morphogenesis and maintenance. Mutations in this gene are the cause of Wagner syndrome type 1. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2009]</p>