

## Product datasheet for **RR217768**

### Vcan (NM\_053663) Rat Tagged ORF Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Vcan (NM\_053663) Rat Tagged ORF Clone  
 Tag: Myc-DDK  
 Symbol: Vcan  
 Synonyms: Cspg2  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 Cell Selection: Neomycin  
 ORF Nucleotide Sequence: >RR217768 representing NM\_053663  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTTGATAAATGAACGGCATCCTATGGATGTGCTCAACCTTACTGTTAACGCATGCACTGCATAAAG  
 CCAAAATGGAAGAAAACCCACCTGTTAAAGGCTCTCTGTCTGGAAAAGTGATCCTACCTTGTCATTTTTT  
 AACCTTGCCACCTTACCACCCGATTACAACACGAGTGAATTTCTCAGAATCAAATGGTCTAAAATAGAA  
 GTGGACAAAAATGAAAAAGACATAAAGGAGACTACTGTCCTGGTGGCCCAAGACGGGAACATCAAGATTG  
 GTCAGGACTACAAGGGGGGGTATCAGTGCCTACGCATCCCGATGACGTAGGCGATGCCTCTCTACCAT  
 GGTCAAACCTCCGTGCTAGTGACGCAGGTGTCTACCGCTGTGATGTATGGCATTGAAGACACTCAG  
 AACACGATGTCGCTGGCCGTGGACGGTGTCTGTTTCACTACAGGGCAGCGACCAGCAGATACACTCTGA  
 ACTTCGAGTCTGCTCAACAGGCTTGTGGACATCGGGGGCGTCAAGCAACCCAGAGCAGCTGTTTCG  
 TGCCTATGAGGATGGATTTGAGCAGTGTGATGCAGGATGGCTGTCTGACCAAACCTGTCAGATATCCATA  
 CGGGCTCCCCGAGAGGGCTGTTATGGAGACATGATGGGAAGGAAGGGTCCGGACCTATGGATCCGCT  
 CTCCCAGGAAACCTATGATGTATTGCTATGTGGATCATCTGGACGGCGATGTGTTCCACACTGCTGC  
 TCCCAGTAAATTCACCTTCGAGGAGGCCGAAGCAGAGTGTGCAAACCGGGATGCCAGGCTGGCGACTGTT  
 GGGAACTTCACGCAGCTTGGAGGAACGGCTTTGACCAGTGCGATTACGGCTGGCTATCGGATGCCAGCG  
 TGCGGCACCCTGTGACTGTGGCCAGGGCCAGTGTGGAGGTGGTCTACTTGGGGTGAAGACCCTGTATCG  
 TTTTGAGAACCAGACATGCTTCCCTCTCCCTGATAGCAGATTTGATGCCTACTGCTTTAAACGTCGAATG  
 AGTGATATGGTTGTAATGGTCAATAGATTCAGAATCTAAAGAAGAGGAACCTTGCAGTGAAGAAA  
 CAGATCCACTGCATGATCTGTTTGTGAAATTTACCCGAGTTACCAGATTCCTTCGAAATAGACATATA  
 TCACAGTGAGGAAGATGAAGATGGAGAGGAGGACTGTGTAATGCAACTGATGTAACAACCACTCCGTCA  
 GTGCAGTACATCACTGGGAAGCCACATGCTACTACAGTGCCCAAAAACCCAGAAGCTGCAGAAGCGAGGC  
 GTGGCCTGTATGAAAGTGTTCGCCTTCTCAGAATTTCTCAAATACTCCGCAACTGACACCCATCAGTT  
 TATACCGCCGAAACAGAATTGCAACTACCATGCAATTTACCAATCAAAGAAGCCACTGAATTGTTA  
 GAAATCACATGGAACCCGAGACCTACCCTGAAACACCAGAACACTTTTCAAGTGGTGAGCCTGATGTTT



TCCTTACACTGCCATCCCATGATGGTAAAACCACCAAATGGTCAGAGTTCATCACAGAGCAATCCAAA  
 CACAGAAAATCCAGAACCAAAACAACTAAGCCTATACCTCTGTTTCTGAAAGAGTTTTCCAGGAGAGGGT  
 GCCATTGACCAAGCATCCCAGCAAAACAATCTTTCCACGGCTACAGAAGTAGCACTTGGTAAAGAGACAG  
 ACCAAAGTCTACCATATCTACCTCTAGCATACGTTCCAGGTTCTGTGTGTCAGTACATGCCTTGGAGGAAGA  
 TCCAATTGCTCTAACAGGAATCTCACAGACTGATGAATCCATGTCTACTGTGAAAGCTGGGTAGAGATG  
 ACCCCTAGCCAACTGTAGAGTTCTCTGGGAGTCTTCCAGCTCCTACTATTGAAGGCTCTGGGAAGTAG  
 AAGAATATACAAAATAAAATTTTCAACACGGTAAGTACTGTTGCCACAGAGAGAGCCACAGATACGCTCAT  
 CCCCTTGGATATGAGCAACATCATGATCACAGACCACCACATTTATACTCCTGCAACCACCGCTCCTTTG  
 GATTCACAGCTACCTTCTACAGATGCACGGCTACACAATTTGGAATTCAAACCACCACCTCTGAGTGGG  
 TTTCCAGTACATCTTTGAAAGGAAGGAAAAACAGAGGAAGACAAAGAAAGAGATACAAATGCAGCCACAC  
 AGGGGAAGTCCAACCAGCGACAGAGAGGTGAGTCGTTACTCTTAACTCAGAATTAGAAAAGTTCAAAT  
 GTGGCTGCATCTAGTCTTTGGACACCTGGGAAGGTTTTGTGCCAGAGACAACATCAACAGTGTCCGAAA  
 AGGAAATGGCAACACAACCTCTGTTTTACAGAAAACAAGTGTAGTGAATTTGGAGACACAGTCTTT  
 TGAGCATAGTAGTACAGTACAGCCAGGTACAGGAAGAGCTGACCACTCTCTCAGGAAAGCCCCCTTG  
 ATTTTTATGGACCTGGGTTCCAGGAGATGCTAGTACTGATATGGAATTCATCACTGCTTCTCATTACAT  
 TAGATTTGGAGTCCGATACCAAAGTCAAAAAGAATTACCAAGTACTCTGCTCCCAAGTGTGGAGACTTC  
 ATCCTCCTCTGAGCCAATAGGATTAGTCCGAGTACTGTATTGGACATAGAAATTTGGAAGTTATGAAT  
 CAGACATCCAAGAAGACTGATTTCTGAACTATCAGGAAAGCCAACCTCCCAAGCAGAAGTAAGGGATT  
 TATATCCAGGTCTGGGAGAAGATTTTAGTGGTACTCCAGTGAATATCCAACAGTGTCTTCTACAACAAT  
 GAAAGAGGAAACAGTGGGGATGGGAGGCTCTGAGAATGAACGAGTTAAGGATACACAGACTTTATCATCT  
 ATACCACCTACCTCAGACAACATCAACCAGTGCCTGACTCAAAAGGATTCGGCAGTACTGTGGCCAGCA  
 CCACAGCCTTCCCTTGGGAAGAGTTCATGACCTCAGCTGAGGGCTCAGGTGAGGAGCTGCTCAGTCA  
 GAGCTCTGTTAGTCTAGTCTTCCACTAGGTGTGGACATTTCTTCTACTACAGAGTCTCCATATTTTGT  
 CAAGAGTTTGAAGAAGCGCTGCAGTGACAGAAGCAAGTAAACAATCTGCTTTGCCAATAGCAAGTGAAGT  
 GAAATACTGTAGATCTGACAGAAAACAGGGACATAGAGGTAAACAGCACAAATGTCAAGTACACTTCCCCA  
 GACAATGGAGCCAGCCAAATATGGTCTAAACCAGAAGTCAATCCTGAAAAACAAGAGATTGGAAGCGAA  
 ACAGTGACACAGGATAAAGCTCAGGGACAAAAGTCTTTTGAATCGCTCCACAGTTCTCTTGCACCAGAAC  
 AAACAACCTTGGAAAGCCAATCACTTATTGAACTGAAGTCCAAACTTCATATTACTCTATGTTAACAAC  
 AATGAAAAACATACTAATAAGGAAGTGGAGGAGGAAGGCACGTCCATAGCTCATATGTCTACTCCA  
 GGCCCGGGAATCAAAGGCTTGAATCATATCCTACCCATCCTGAAGCTACTGGGAAGTCAACTCTTTCT  
 CAGCTTCTGCCTTAGTACTGAATCTGGACCAGCTAGAAGTGTAGTCATGGATTCTCAACTCAAGAGGA  
 AGAAAGTATAAACTCTTCCAAAAGGACATGATACTAACACATAAAGAGTCAAATTTCTGATCTCTGTTT  
 TCTGGCCTGGGATCAGGAGAGGCTTTGCCTCCTCTCCCTACAACATCAGTGAAGTTGACTGACATGGGAA  
 AGATCAATAGCACATTGTATCCTGAGACATCTCATGGAAGGCTTAGGAACAAGCATCTTAGGAGATAA  
 CCATGAAAGAAATGAAAAATGTGTCAAATGAAGTTAGAACCCTATTTCCGAAACAGGCAGCATTTCTCAA  
 GACAGTACGGAGGCACCAATACAACCTTGAAGTATACCAGAACAGAAGAATCTACAACCTCACCTCTTC  
 CTTTCAAGAGCTCATGGACACGGAACATTTCCAAAAGCAGCCCTCAGGTGGGAAGAGGAAATCCAGAC  
 CCATAGGCCACAACTATGACTGGACAGATTACCAATGACAATTTCTCAGTGTGAGAAGCTGAAGCAGCA  
 CCAACCTCTGCCCTGCTTTTCTGCCTGAAACCTACAGTGTGAAATGACCAAGCCTTTGCTACATCAC  
 TGTCAAAAACATCTGACTTGTGTTGATGCAAATTTCTGGAGAAGGATCTGGAGAAGTGGATGGTCTTGACTT  
 AGTGTACACTTCTAGAATACTCAGGCAAGCAGTCAAGGAGACAGCATGTTTGCCTCTCATGGATTCTT  
 GAAAAGCATCCAGAGGTGTCAAGGACCGAGACTGGAGCTACTGATGGATCTCCAACAGCTTCAGCGATGT  
 TCCTGCATCAGTCAGAGTACAATGAGAGTTCCTGTATCCAACCAGCACACTGCCAAGCACAGTGACATA  
 TGAGAGTCCCTCAGAAGGATTGTCAGATGGTTGCAAGACCATATCAGATTGCAAGTTTCTACCTTGAAA  
 CCTAGCAGAAGGAAAGCCACTGAGAGCGTTATTATAGATTTAGACAAAGAGGATAGTAAGGACTTAGGGT  
 TGGCAATTAAGTACTGAGAGTCTATTGTTGAAATTTCCCTGAGCTGACATCAGATAGAAATATTATTATAGA  
 CATTGATCACACTAAACCTGTATATGAGTACATCCCTGGAATACAAACAGACCTAGATTAGACATACCA  
 TTGGGATCACATGGCAGTGTGAAGAAAGCCTTGAAGTTCAAGAGAAGTATGAAGCAACTATTAACCTGT  
 CTCCAACCTGAGGAAGCATTGACGGCTCTGGTGTGCACTTCTGCTGGTCAACTCAAGCGATATACAA  
 TGAGTCTGTGACTCCCAGTGTGAAAGCAGCCAGAGGACATAAGCTTTAGTTTTGCAACTGGAATCCCA  
 GTTTCTAGCACAGAGACAGAATTAATACTTTCTTCCCTACAGTGTCAACCCTGCACATTTCTAGCAAAC  
 TAACCACCGTAGTCCAGAGATTGATAAACCAACATTGAAGCAATATCACTGGATGATATTTGAAATC

AAGCACCTTGCTGATGGCCAAGCTATTGCCGATCAGAGTGAAGTAATATCAACACTAGGCCATTTGGAA  
AAGACACAGGAAGAGTATGAAGAAAAGAAATATGGAGGTCCTTCTTTTCAGCCAGAATCTTTTCAGGAG  
TGGGTGAAGTATTCACAGATGCCCTGCTTATGTAAGTATTGGTAGGACATACTCTGTAGCTCAGCCTTT  
AACAGAATTCCTCAATGTGGTAGGACAATCTGACTCCACACATTACACTGAAGCAACATCTGCAGTTTCC  
TCTGTGACAGAGCTGTCTCCTCAGACACCATCTTCTCCCTCTCCTGTCTACATAGACAGTGGAGTCTCTG  
AATTCACAGAGGTCCCCACAAAAGTCTCAGCCAGCTCCTACTGCCGCTTCATCACAAAAGTTGATAGA  
GGTTCTTTTAAGGAAGTGCCTGCTAATATTGAAGCTACCATCAAGTCGCTGGGTGAAAATGATCACGGA  
ACAGAGTCTCCATCCATGTCTCCTAGCCCTGCTTTAGACATTTTCAAGAGACGACAGTAAACCTAAGTTAC  
TAGAAGACCTGGAACTTCTCCACAAAACCCGAGACTTCCCAAGATTCCCAAAACAAAAGCAAATGATCA  
AATTCAGGAAAAACAGCTGGAATCCTTGCTGGTATCAAAAACAACAGAGAGTGGACCAGTCGTTACAGCT  
GCAGATGACATGGAGCTAGGAGATGCCACACAGCGCCACATTCTGCTTCTGCTCCTGCAGCTTTTACGGG  
TTGAGACAAGTATGGTACCTCAGCCATCCACAGGAGCCTGAGAGGCCAACCTTTCCTTCCCTGGAAAT  
TAACCATGAAACACACACATCATTATTTGAAGAATCTATATTGGCAACATCTGAAAAACAAGTGCCCAA  
AGAATTCTTGATTACAGTAACCAGGCAACAGTCAGTACTCTGGATCTAAATACTGAACACTCAATACCAC  
CATTTTCCATTCTGGACAATTCTAACGAACTGCTTTCCTGATTGGCATTAGTGAAGAGACCGTGGAAAGG  
CACAGCAGTTTATCTACCAGGACCTGATCTCTGCAAAAACAACCCATGCCTCAATGGAGGCACCTGCTAT  
CCTACTGAGACTTCTATGTGTGCACCTGTGCACCTGGCTACAGTGGAGACCAGTGTGAACCTGGATTTTG  
ATGAATGTCACTTAACCTTGTGCGAATGGAGCCACCTGTGTGGACGGTCTGAATACATTTAGATGCCT  
CTGCCTTCCGAGTTATGTGCGTGCACCTCTGCGAACAAGACACTGAGACATGCGACTATGGCTGGCACAAA  
TTCCAAGGGCAATGCTACAAGTACTTTGCTCATCGCCGTACATGGGATGCTGTGAAAGGGAGTGTGCGC  
TGCAGGGTGGCCACCTCACAGCATCCTTCTCATGAGGAACAAATGTTTGTGAATCGTGTGGCCATGA  
TTACCAGTGGATTGGCCTCAATGACAAGATGTTTGAACATGACTTCCGCTGGACTGACGGCAGCGCACTG  
CAATATGAGAACTGGAGACCAACCAGCCAGACAGCTTCTTTTCTGCTGGAGAAGACTGCGTTGTGATCA  
TTTGGCATGAGAATGGCCAGTGAATGACGTCCCCTGCAACTACCACCTACCTACACCTGCAAGAAGGG  
AACAGTTGCTTGCAGCAACCCCTGTTGTAGAAAATGCCAAGACCTTTGGAAAAGATGAAACCACGTTAT  
GAAATCAACTCCTTGATTAGATACCACTGCAAAGATGGTTTCATTAGCGTCACTTCCAACATACCGGT  
GCCTAGGAAATGGGAGATGGGCAATGCCTAAAATAACCTGCATGAACCCATCTGCATACCAAAGGACTTA  
TTCTAAGAAATACTTAAAAAATTCCTCATCAGTCAAGGACAATTCTATAAATACGTCAAACATGAGCAT  
CGCTGGAGCCGGAGGTGGCAGGAAACGAGGCGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RR217768 representing NM\_053663  
 Red=Cloning site Green=Tags(s)

MLINMNGILWMCSTLLLTHALHKAKMEENPPVKGSLSGKVILPCHFSTLPTLPPDYNTSEFLRIKWSKIE  
 VDKNGKDIKETTTLVAQDGNIKIGQDYKGRVSVPTHPDDVGDASLTMVKLRASDAGVYRCVDMYGIEDTQ  
 NTMSLAVDGVVFHYRAATSRYYLNFESAQQAQLDYGAVIATPEQLFAAYEDGFEQCDAGWLSQTVRYPI  
 RAPREGCYGDMMKKEGVRTYGFRRSPQETDYVYCVVDHLDGDFVHIITAPSKFTFEEAEAEKANRDARLATV  
 GELHAAWRNGFDQCDYGLSDASVRHPVTVARAQCGGGLLGVRTLYRFENQTCFPLPDSRFDAYCFKRRM  
 SDMVVNGHPIDSESKEEPCSEETDPLHDLFAEILPELPDSFEIDIIYHSEEDGEDDCVNATDVTTPS  
 VQYITGKPHVTTVPKNPEAAEARGLYESVAPSQNFNTSATDTHQFIPAETELSTTMQFTKSKEATELL  
 EITWKPETYPETPEHFSGEPDVFPTLPSHDGKTKWSEFITESNPNTENPEHKQPKPIPLFPEEFSGEG  
 AIDQASQQTIFSTATEVALGKETDQSPTISTSSIRSGSVSHALEEDPIALTGISQTDSEMSVSWVEM  
 TPSQTVESGSSSAPTIEGSGVEEYTNKIFNTVTDLPQREPTDLIPLDMSNIMIDHHIYTPATTAPL  
 DSQLPSTDARPTQFGIQTTSSEWVSSTSFEGRKEEDKERDTNAAHTGEVQPATERSDRLLLTSELESSN  
 VAASSPLDTWEGFVPETTSTVSEKEMANTPVFTETSDVANLETQSFHSSSSQPRVQEELTTLGKPPPL  
 IFMDLGSGDASTDMEFITASSFTLDLESQTKVKKELPSTLSPSVETSSSSEPIGLAPSTVLDIEIIVVMN  
 QTSKKTILISELGGKTSQAEVRDLYPGLGEDFGSDSSEYPTVSSTTMKEETVGMGSENERVKDTQTLSS  
 IPPTSDNINPVPDVKGFSTVASTTAFWPWEEFMTSAEGSGEELSSVRSSVSLVPLGVDILPTTESPYFD  
 QEFEEAAAVTEAGKQALPIAVSNTVDLTENRDIEVNSTMSVDLPQTMPEAKLWSKPEVNPEKQEIIGSE  
 TVTQDKAQGQKSFESLHSLAPEQTTLSESLIETEVQTSYYSMLTMMKYNTNNEVEEEGTSIAHMSTP  
 GPGIKGLESYPHPEATGKSYFSASALVTEGPARSVVMDSSSTQEEESIKLFQKDMILTHKESNDLSF  
 SGLGSGEALPPLPTTSVSLTDMGKINSTLYPETSHMESLGTSLGDNHERMKNVSNVVRTLISSETGISIQ  
 DSTEAPNTLSDTRTEESTTSPLPFMKLMDEHSPKQTLRWEIEIQTHRPTMTGQITNDNSSVSEAEAA  
 ATSAPAFLPETYSVEMTKAFATSLSQSDLFDANSGESEGEVDGLDLVYTSRRTQASSQGDMSFASHGFI  
 EKHPVSRTEGTGSDGPTASAMFLHQSEYNESSLYPTSTLPSTVYTESPSEGIADGLQDHIRFEVSTLK  
 PSRRKATESVIIDLKDSDKDLGLAITESAIIVEILPELTSDRNIIIDIDHTKPVVEYIPGIQTDLSDIP  
 LGSHGSSEESLEVQEKYEATINLSPTEEAFDGGSDALPAGHTQAIYNESVTPSDGKQPEDISFSFATGIP  
 VSSTETELNTFFPTVSTLHIPSKLTTASPEIDKPNIEAISLDDIFESSTLSDGQAIADQSEVISTLGHLE  
 KTQEEYEEKKYGGSFQPEFFSGVGEVFTDAPAYVSIGRYSVAQPLTEFPNVVQSDSTHYTEATSAVS  
 SVTELSPQTPSSPSPVYIDSGVSEFTEVPHKSAQAPATAASSQKLEGSFKEVRANIEATIKSLGENDHG  
 TESPSMSPSPALDISEDDSKPKLLEDLETSPTKTETSQDSPNKANDQIPGKTAGILAGIKTTESGPVVTA  
 ADDMELGDATQRPHSASAPAAFRVETSMVPQPIQEPERPTFPSLEINHETHSLFEESILATSEKQVSQ  
 RILDYSNQATVSTLDLNTHEHSIPPFILDNSNETAFLIGISEETVEGTAVYLPGLDCKTNPCLNGGTCY  
 PTETSYYCTCAPGYSGDQCELDLDFDECHSNPCRNGATCVDGLNTRFLCLPSYVGLACEQDTETCDYGHK  
 FQGQCYKYFAHRRTWAAERECRLQGAHLTSLSHEEQMFVNRVGHYQWIGLNDKMFEDHFRWTDGSAL  
 QYENWRPNQPDFSFFSAGEDCVVIWHENGQWVPCNYHLTYTCKKGTACGQPPVVENAKTFGKMKPRY  
 EINSLIRYHCKDGFIRHLPTIRCLGNRWAMPKITCMNPSAYQRTYSKYLKNSSSVKNDSINTSKHEH  
 RWSRRWQETRR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI



<b>ORF Size:</b>	7173 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_053663.1</a> , <a href="#">NP_446115.1</a>
<b>RefSeq Size:</b>	9470 bp
<b>RefSeq ORF:</b>	7176 bp
<b>Locus ID:</b>	114122
<b>Cytogenetics:</b>	2q12
<b>MW:</b>	261.8 kDa
<b>Gene Summary:</b>	extracellular matrix protein secreted by many cell types; part of the large chondroitin sulfate proteoglycan (CSPG) family [RGD, Feb 2006]