

Product datasheet for **RC228689**

PEG3 (NM_001146186) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEG3 (NM_001146186) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PEG3
Synonyms:	PW1; ZKSCAN22; ZNF904; ZSCAN24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228689 representing NM_001146186 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGCCTCAAAGCACTTGTCTGCCACCAAACCTAAGAAGTCTGGGCCCAAATCTGTATGAGCTAG
ACAGTGACTTGACTAAGGAGCCGGATGTCATCATAGGAGAAGGTCCAACCTGACTCTGAGTTTTTTCATCA
GAGGTTTCGGAACCTAATCTATGTGGAATTTGTTGGGCCTCGGAAGACCCTGATCAAACCTCGAAACCTC
TGCCCTCGATTGGTTGCAGCCGGAGACCCGACCAAGGAGGAGATCATCGACTCTTGGTCTTGGAGCAGT
ACCTGACCATCATCCCTGAAAAGCTCAAGCCTTGGGTGCGAGCAAAAAGCCGGAGAAGTGTGAGAAGCT
CGTCACTCTGCTGGAGAATTACAAGGAGATGTACCAACCAGAAGACGACAACAACAGTGACGTGACCAGC
GACGACGACATGACCCGGAACAGAGAGAGTCCCTCACCACCTCACTCAGTCCATTCTTTCAGTGACCCGG
ACTGGGACCGGAGGGGCAGAAGCAGAGACATGGAGCCACGAGACCCTGGTCCCACACCAGGAACCCAAG
AAGCAGGATGCCTCCGCGGGATCTTCCCTTCTGTGGTGGCGAAAACAAGCTTTGAAATGGACAGAGAG
GACGACAGGGACTCCAGGGCTTATGAGTCCCGATCTCAGGATGCTGAATCATACCAAAATGTGGTGGACC
TCGCTGAGGACAGGAAACCTCACAACACAATCCAGGACAACATGGAAAATACAGGAAGCTGCTCTCCCT
CGTGCAGCTTGTGAAGACGATGGCCACTCCCACATGACGACGGCCACTCATCAAGATCCAAGAGAAGT
GCCTACCAAGCACCAGTTCGAGGTCTAAAACATGCTGAAAGCCAAAATCAACCCACCGCGGGGGA
TTTGTGAAGATGAATCTTCCACGAGTGATAATGGAAAATTCATCAAGGATGTGTACCGAGTTCCAA
ATCGGGAAGAGCAAGGGAGTCAAGCGACCGGTACAGAGATTCCCAGAATGTCAGATGATAACTGGAAG
GACATTTTCATTGAACAAGAGGGAGTCAAGTATCCAGCAGCGGGTTTATGAAGGGAATGCATTTAGGGGAG
GCTTTAGGTTAATTCAACCTTGTTCAGAAAAGAGAGTTCTTGAAGAAAAGAGGCGCTATCATTTTGA
CACAGATGGGAAGGGCTCGATTACGATCAAAAAGGCTGTCCAGGAAGAAGCCCTTTGAATGTGGTAGT
GAGATGAGAAAAGCCATGAGCGTGAGCAGCCTGAGCAGCCTCAGTCCCCCTCCTTACCGAGTCACAGC
CAATTGATTTGGGCAATGCCATATGTATGTGATGAGTGTGGGAGTTCAGTGTGATCTCAGAAAT
TGTTGAGCACCAGATCATGCATACTAGAGAGAACCTCTATGAGTATGGTGTGAGTCTTTATCCACAGTGTG



[View online »](#)

GCTGTCAGTGAAGTTCAGAAAAGTCAGGTTGGAGGGAAACGTTTTGAATGTAAGGACTGTGGAGAGACCT
 TCAATAAGAGTGCCGCCTTGGCTGAACATCGGAAGATTGCTAGAGGTTATCTTGTGGAATGTAAGAA
 TCAGGAATGTGAGGAAGCCTTATGCTAGCCCCACCTTTAGTGAGCTTCAGAAAATATATGGCAAAGAC
 AAATTCTACGAGTGCAGGGTGTGTAAGGAAACCTTCTTCATAGTTCTGCCCTGATTGAGCACCAGAAAA
 TCCACTTTGGGGATGACAAAGATAATGAGCGTGAACATGAACGTGAACGTGAACGTGAGCGCGGGAAAC
 CTTTAGGCCAGCCAGCCCTTAATGAGTTTCAGAAAATGTATGGTAAAGAGAAAATGTACGAATGTAAG
 GTGTGTGGGAGACTTTCTTCATAGCTCATCCCTGAAAGAACATCAGAAAATCCATAAGAGGGAACC
 CATTGAAAACAAGGGTAAAGTGTGTGAGGAAACCTTTATTCCTGGTCAGTCCCTTAAAAGCGCTCAGAA
 AACTTACAATAAGGAGAAGCTCTGTGACTTTACAGATGGCCGGGATGCCTTCATGCAAAGCTCAGAGCTC
 AGTGAGCATCAGAAAATTCATTCTGAAAGAACCTCTTTGAAGGCAGAGGGTATGAGAAAATCTGTCAATC
 ATAGTGGGCCATTCAGTGAATCTCAGAAGATCATACTATAACAAGACCTCTTGAAGTGTGAGGACGA
 AAAGGCGTTCACCATTAGCTCTAACCCCTATGAAAACCAGAAGATTCCCCTAAGGAAAATGTCTATGAG
 GCAAAATCATATGAGAGGTCTGTTATTCATAGCTTAGCCTCTGTGAAGCTCAGAAAAGTACAGGTGAG
 CAGGGCCAGTAAACAAAAGTAAATGGCAGAGTCTACCATTAGAGCTTCGATGCTATCAACCATCAGAG
 AGTTTCGTGCTGGAGGGAACACCTCTGAAGGAAGGGAATACAGTAGGTCTGTTATCCATAGCTTAGTGGCT
 TCCAAACCTCCAAGAAGTCAAAATGGAATGAATTGGTGGAAATCTAATGAGAAGGGAGAATCCTCCATTT
 ATATCTCAGACCTTAATGATAAGCGACAGAAGATTCTGCCAGAGAGAACCCTTGTGAAGGGGGCAGTAA
 GAATCGCAACTATGAAGACTCTGTACATACAGAGTGTATCCGTGCCAAACCTCAGAAAAGTGTCTCTGGA
 GAGGGATCTGGTGTGTTAAGAAGGATGGCGAATTCCTGTTCCAGCTCAAATGTCCGTGAATACCAGA
 AGGCTCGTGCTAAAAAGAAAATACATTGAGCATAGGAGCAATGAGACCTCTGTAATCACTCTCGCTTT
 TGGTGAACAAACATTTGCCCCGAGGGATGCTCTATGAATGTCAGGAGTGTGGGAGTGTCTTGTCTCAT
 AGCTCTGACCTCACTGAGCACCAGAAGATTGATGATAGGGAAGCCCTCTGGAAGCAGAAAATGTAAT
 GGTCTGATTCGACAGTTGGCCCTACTGACCCTCAAACAAGTACGCCCAAGAGCAGTATGCTAAAGA
 GCAAGCGCGGAACAATGTAAGGACTTCAGACAATTTTTGCTACCAGCGAAGACCTCAACACAAAACAG
 AAAATCTATGACCAAGAGAAGTCTCATGGCAGGAGTCTCAAGGCGAGAATACTGATGGGAGGAGACCC
 ACAGCGAGGAGACCCATGGTCAGGAGACAATTGAAGACCTGTCAATCAAGGCTCAGACATGGAAGACCC
 TCAGAAGGATGACCCTGATGACAAAATCTATGAATGTGAGGACTGTGGCCTGGGCTTTGTGGATCTCACA
 GACCTCAGACCCATCAGAAAAGTCCACAGCAGGAAGTGCCTGGTTGACAGTGGGAGTACACACATTCTG
 TAATTCACACCCATTCCATCAGCGAGTATCAGAGAGATTACACTGGAGAGCAGCTGTATGAATGTCCAAA
 GTGTGGGGAATCTTTTATTCATAGCTCATTCTTTTCGAGCATCAGAGAATCCATGAACAAGACCAGTTG
 TATTCCATGAAGGGGTGTGATGATGGTTTTATTGCCCTCTGCCATGAAGCCACGGAGGAATCGTGCTG
 CAGAGAGGAATCCTGCTCTGCTGGGTCGGCCATTGATGCCTTTTGTGTGGACAAGGCTTCATTATAG
 CTCTGCCCTTAATGAGCATATGAGACTTCATAGGGAAGATGATTTACTGGAGCAGAGCCAGATGGCTGAG
 GAAGCTATCATTCCAGGCTTAGCCCTCACTGAGTTTCAGAGAAGTCAAGCCGAAGAGAGACTCTTTGAAT
 GTGCAGTCTGTGGAGAATCTTTCGTCAACCCAGCAGAACTGTCAGATCACGTAACGTTCATAAAGATGA
 GCCCTATGAGTACGGGTCCTCTATACTCACACCTCATTCTTACTGAGCCCTCAAAGGAGCTATACCA
 TTCTATGAATGCAAGGATTGTGGTAAGTCTTTATTCATAGCACAGTCTCACTAAACATAAGGAGCTTC
 ATCTGGAAGAAGAAGAAGATGAAGCAGCAGAGCTGCAGCAGCAGCAGCCAGGAAGTTGAAGCCAA
 GTCCATGTTCCACAAGTAGTTCTGAGGATTGAGGCTTAAACGTAGAGGCTGCTGAGCCAGAAGGCTGAAG
 GCTGCCCAGCCAGAAGTGGAGGCTGCTGAGCCAGAAGTGGAGGCTGCTGAGCCAAACGGAGAGGCTGAAG
 GGCCAGATGGAGAGGCTGCAGAGCCATTGGAGAGGCTGGACAGCCAAATGGAGAGGCGCAGCAGCCAAA
 TGGGGATGCTGATGAGCCAGATGGTGCAGGATTGAAGACCCAGAAGAAAGAGCTGAAGAGCCAGAGGGA
 AAAGCTGAAGAGCCAGAGGGAGATGCCAGCAGCCTGACGGTGTGGGAATTGAAGACCCAGAAGAAGGTG
 AAGATCAAGAGATTGAGTGAAGAACCATACTATGACTGCCATGAATGCACAGAAAACCTCACTCCAG
 CACAGCATTGAGTGAACACCTGAAAACCTATGCCAGCATGATCATATTTGAGCCTGCAAAATGCCTTTGGG
 GAGTGCTCAGGCTACATGAACGTGCCAGCACCAGCAGGTGGTCCAATCAAGCTGATGAGAAGTACT
 TCAAATGTGACGCTGTGGGAGCTCTCAATGACCGCCTGTCCCTGCCAGACACCAGAATACCCACAC
 TGGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC228689 representing NM_001146186
 Red=Cloning site Green=Tags(s)

MLPPKHL SATPKKSWAPNL YELDSL TKEPDV IIGEGPTDEFFHQFRNLIYVEFVGPRTLIKLRNL
 CLDWLQ PETRTKEE I IELLVLEQYL TIIPEKLPWVRAKKPENCEKLVTLLENYKEMYQPEDDNNSDVTS
 DDMTRNRRESSPPHSVHSFSDRDWDRRGRSRDMEPRDRWSHTRNPRSRMPPRDL SLPVVAKTSFEMDRE
 DDRDSRAYESRSQDAESYQNVVDLAEDRKPHTIQDNMENYRKL LSLVQLAEDDGHSHMTQGHSSRSKRS
 AYPSTSRGLKTMPEAKKSTHRRGICEDESSHGVI MEKFIKDVSRSSKSGRAESSDRSQRFRMSDDNWK
 DISL NKRESVIQQRVYEGNAFRGGFRFNSTL VSRKRVLERKRRYHFDTDGKGSIHQKGCPRKPFECGS
 EMRKAMSVSSLSLSSPSFTESQPIDFGAMPYVDCGRSFSVISEFVEHQIMHTRENLYEYGESFIHSV
 AVSEVQKSVQGGKRFECKDCGETFNKSAALAEHRKIHARGYLVECKNQECEEAFMPSPTFSELQKIYKGD
 KFYECRVCKETFLHSSALIEHQIHFDDKDNEREHERERERERGETFRPSPALNEFQKMYGKEKMYECK
 VCGETFLHSSSLKEHQIHTRGNPFENKGVCEETFIPGQSLKRRQKTYNKEKLCDFTDGRDAFMQSSSEL
 SEHQIHSRKNLFEGRGYEKSVIHSGPFTESQKSHITRPLESDEDEKAF TISSNPYENQKIPTKENVYE
 AKSYERSVIHSLASVEAQKSHSVAGPSKPKVMAESTIQSFDAINHQRVRAGGNTSEGREYSRSVIHSLVA
 SKPPRSHNGNELVESNEKGESSIYISDLNDKRQKIPARENPCEGGSKNRNYEDSVIQSVFRAKPKQSVPG
 EGSGEFKKDGESVSPSSNVREYQKARAKKYYIEHRNETSVIHSLPFGEQTFRPRGMLYECQECGECFAH
 SSDLTEHQKIHDREKPSGSRNYEWSVIRSLAPTDPQTSYAQEYAKEQARNKCKDFRQFFATSEDLNTNQ
 KIYDQEKSHGEESQGENTDGEETHSEETHGQETIEDPVIQGSMDPQKDDPDDKIYECEDCGLGFVDLT
 DLTDHQKVHSRKLVD SREYTHSVIHTHSISEYQRDYTGEL YECPKCGESFIHSSFLFEHQRIHQDQL
 YSMKGCDDGFIAL LPMKPRRNRAAERNPALAGSAIRCLLCGQGF IHSSALNEHMLRHREDDLLEQSMAE
 EAIIPGLALTEFQRSQTEERLFECAVCGESFVNP AELADHVTVHKNEPYEYSSYTHSFLTEPLKGAIP
 FYECKDCGKSF IHSTVLTKHKELHLEEEEEDEAAAAAQAQVEANVHVQVVLRIQGLNVEAAEPEVE
 AAPEVEAAEPEVEAAEPNGEAE GPDGEAAEPIGEAGQPNGEAEQPNGDADEPDGAGIEDPEERAEEPEG
 KAAEPEGDAEPDGVGIEDPEEGEDQEIQVEEPPYDCHECTETFTTSS TAFSEHLKTHASMIIFEPANAFG
 ECSGYIERASTSTGGANQADEKYFKCDVCGQLFNDRLSLARHQNTHTG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6168_c09.zip

Restriction Sites: Sgfl-MluI

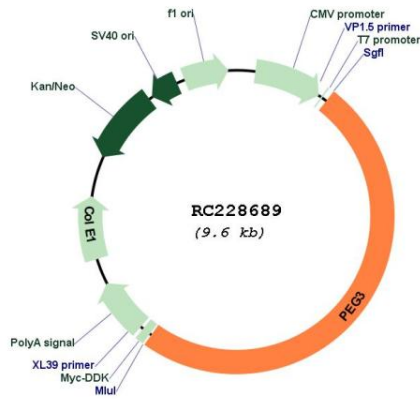
Cloning Scheme:



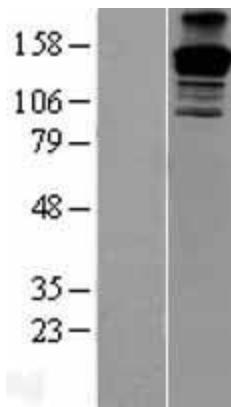
ACCN: NM_001146186

ORF Size:	4764 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:	<ol style="list-style-type: none">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_001146186.1 , NP_001139658.1
RefSeq ORF:	4767 bp
Locus ID:	5178
UniProt ID:	Q9GZU2
Cytogenetics:	19q13.43
Protein Families:	Transcription Factors
MW:	180.6 kDa
Gene Summary:	In human, ZIM2 and PEG3 are treated as two distinct genes though they share multiple 5' exons and a common promoter and both genes are paternally expressed (PMID:15203203). Alternative splicing events connect their shared 5' exons either with the remaining 4 exons unique to ZIM2, or with the remaining 2 exons unique to PEG3. In contrast, in other mammals ZIM2 does not undergo imprinting and, in mouse, cow, and likely other mammals as well, the ZIM2 and PEG3 genes do not share exons. Human PEG3 protein belongs to the Kruppel C2H2-type zinc finger protein family. PEG3 may play a role in cell proliferation and p53-mediated apoptosis. PEG3 has also shown tumor suppressor activity and tumorigenesis in glioma and ovarian cells. Alternative splicing of this PEG3 gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Sep 2009]

Product images:



Circular map for RC228689



Western blot validation of overexpression lysate (Cat# [LY431717]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228689 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).