

Product datasheet for **RC219937**

Inversin (INVS) (NM_183245) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Inversin (INVS) (NM_183245) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Inversin
Synonyms:	INV; NPH2; NPHP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC219937 representing NM_183245
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAACAAGTCAGAGAACCTGCTGTTTGTGTTTCATCATTAGCATCACAAAGTCCATGCTGCTGCCGTTA
 ATGGAGATAAGGGTGCTCTACAGAGGCTCATCGTAGGAACTCTGCTCTTAAAGACAAAGAAGATCAGTT
 TGGGAGAACCACCTTATGTATTGCGTGTGGCTGACAGATTGGATTGTGCAGATGCTCTTCTGAAGGCA
 GGAGCAGATGTGAATAAACTGACCATAGCCAGAGAACAGCCCTCCATCTTGCAGCCCAGAAGGAAATT
 ATCGTTTCATGAACTCTTACTTACACGCAGAGCAAAGTGGATGCAAAAGGATCTGGAAGAGATGACTCC
 TTTGCACTTGACCACCCGGCACAGGAGCCCTAAGTGTGGCACTTCTGCTGAAGTTTATGGACCAGGA
 GAAGTGGATACACAGGATAAAAACAAGCAAACAGCTCTGCATTGGAGTGCCTACTACAATAACCCTGAGC
 ATGTGAAGCTGCTCATCAAGCATGATTCTAACATTGGGATTCCTGATGTTGAAGGCAAGATCCCCTTCA
 CTGGGCAGCCAACCATAAAGATCCAAGTCTGTTACACAGTGCATTCTGGATGCTGCTCCAACA
 GAGTCTTTACTGAACTGGCAAGACTACGAGGGTGAAGTCTCTTCACTTTGCAGTTGCTGATGGGAATG
 TGACCGTGGTTGATGCTTGACCTCATATGAAAGCTGCAATATAACGTCTTATGATAACTTATTTGGAAC
 CCCACTGCACTGGGCAGCTTTATTAGGCCATGCACAGATTGTCCATCTCCTTTTAGAAAAGAAATAAGTCT
 GGAAGTATCCCCTGACAGCCAAGGAGCCACACCTTTGCACTATGCTGCTCAGAGTAACTTTGCTGAAA
 CGGTTAAAGTGTTTTTAAACATCCTTCAGTAAAAGATGATTGAGACCTGGAAGGAAGAATCCTTTAT
 GTGGGCAGCTGGCAAAGGCAGTATGATGTCCTTAGAACTATGCTGAGCTTAAATCGGACATAGATATT
 AACATGGCTGACAAATATGGAGGTACAGCTTGCATGCTGCTCTTTCTGGCCATGTCAGCACCGTGA
 AGTTATTACTGGAAAATAATGCTCAAGTAGTACTGATGTTATGAAACATACTCCACTTTTCCGGA
 CTGTGAGATGGGACACAAGATGTGATTACAGACTCATTAAAGGTGGAGCAAGGGTAGATCTAGTTGAC
 CAAGATGGACATTCTTCTACATTGGGCAGCACTGGGAGGAAATGCTGATGTTTGCCAGATATTAATAG
 AAAATAAGATCAATCCAATGTCCAGGATTATGCAGGAAGAACCCTTTGCAGTGTGCAGCATATGGAGG
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 ACAGCTTTGCATTGGTCTGCAACAATGGATACCTTGTGCCATTAATTAAGTACTGCTAGACTTTGCTGCTT
 TCCCTAATCAGATGGAACAATGAAGAGAGATACACACCCTTGATTATGCTTTGCTTGGTGAGCGCCA
 TGAAGTATCCAGTTCATGTTGGAGCACGGTGCCTGTCCATCGCAGCCATAACAAGATCGCCGCTTC
 AAAATCCAAGCTGTCTACAAAGGTACAAGGTGAGAAAAGCCTTCGAGACAGGAAAAATCTCCTCATGA
 AGCATGAACAGTTGAGAAAAGATGCTGCTGCCAAAAGCGAGAGGAAGAAAACAACGAAAAGAGGCAGA
 ACAGCAAAAAGGAAGGGCGAGCCAGATTCCTGCAGACCCAGGCCCTTCCCTGTCTGCCTAGCACCCAG
 GATGTGCCAGCAGGCAGAGCCGGGCCCCAGCAAGCAGCCTCCTGCTGGCAACGTGGCCAAAGGCCCTG
 AGCCAAGAGACAGCAGAGGATCTCCAGGAGGGTCTTAGGCGGAGCCCTCCAGAAGGAGCAGCATGTTTC
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 GCTTGTGCTCACTTCAGACCCAATGAAGGCAGTATGGAAGCAGGCATCCAGGAGTTCCTCTGTTGAGA
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 CAAGGCAGCAGCAGTATCCAGCGCGCTGGCGAAGCTACCAGTCCAGGAAGCACCTGTCCACCTTCGG
 CATATGAAGCAGCTTGGAGCTGGAGATGTGGACAGATGGAGGCAAGAGTCTACAGCATTGCTCCTCCAGG
 TTTGGAGGAAGGAACTGGAATAAAATCCCCAAACCACTGCAGTAAGCAAGGCCCCCAAGAGTCCATC
 CAAGGGCACCTCAGGCACAAAGTCCACCAAGCACTCAGTGCTTAAGCAAATCTATGGTTGTTCTCACGAA
 GGGAAAAATACATCATCTACAAGATCTGTAAGCCTCTTCTGTGCTGCGTCTCAACTCAGTGAGCAACC
 TACAGTGTATACATCTCCTTGAAGACAGTGAAGATCAAAGAAGTCTTCTATAACCTGCAATCAGCTAC
 TCAGCCAAAAACAAAACAAACCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC219937 representing NM_183245
 Red=Cloning site Green=Tags(s)

MNKSENLLFAGSSLASQVHAAAVNGDKGALQRLIVGNSALKDKEDQFGRTPLMYCVLADRLDCADALLKA
 GADVNKTDHSQRTALHLAAQKGNRYRFMKLLL TRRANWMQKDL EEMTPLHL TTRHRSPKCLALLLKFMAPG
 EVDTQDKNKQTALHWSAYYNNPEHVKLLIKHDSNIGIPDVEGKIPLHWAANHKDPSAVHTVRCILDAAPT
 ESLLNWQDYEGRTPLHF AVADGNVTVDVLT SYESCNI TSYDNL FRTPLHWAALLGHAQIVHLLLERNKS
 GTIPSDSQGATPLHYAAQSNFAETVKVFLKHPSVKDDSDLEGR TSMWAAGKGSDDVLR TMLSLKSDIDI
 NMADKYGGTALHAAALSGHVSTVKLLLENNAQVDATDVMKHTPLFRACEMGHKDV IQTLIKGGARVDLVD
 QDGHSLHWAALGGNADVCQIL IENKINPNVQDYAGRTP LQCAAYGGYINCMAVLMENNADPNIQDKEGR
 TALHWSCNNGYLDAIKLLLDFAAFPQ MENNEERYT PLDYALLGERHEVIQFMLEHGALSI AAIQDIAAF
 KIQAVYKGYKVRKAFDRK NLLMKHEQLRKDA AAKKREENKRKEAEQQKGRSPDSCR P QALPCLPSTQ
 DVPSRQSRAPSKQPPAGNVAQGP EPRDSRGSPGGSLGGALQKEQH VSSDLQGTNSRRPNETAREHSGQS
 ACVHFRPNEGSDGSRHPGVPSVEKSRELRLQIIQRERRR KELFRKKNKAAAVIQRAWRSYQLRKHL SHLR
 HMKQLGAGDVDRWRQESTALLLQVWRKELEL KFPQTTAVSKAPKSPSKGTS GTKSTKHSVLKQIYGCSHE
 GKIHHPTRSVKASSVLR LNSVSNLQCIHLLENSGRSKNF SYNLQSATQPKNKTKP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8019_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

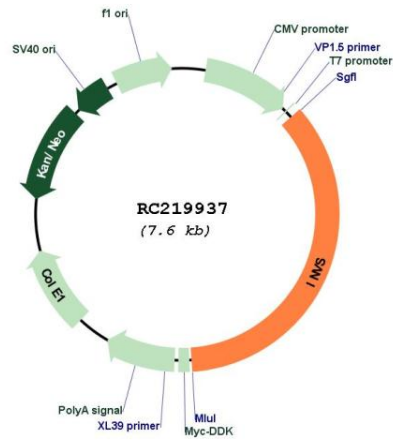


* The last codon before the Stop codon of the ORF

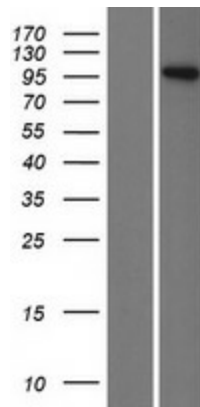
ACCN: NM_183245

ORF Size:	2685 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_183245.2 , NP_899068.1
RefSeq Size:	3370 bp
RefSeq ORF:	2688 bp
Locus ID:	27130
Cytogenetics:	9q31.1
MW:	99.4 kDa
Gene Summary:	This gene encodes a protein containing multiple ankyrin domains and two IQ calmodulin-binding domains. The encoded protein may function in renal tubular development and function, and in left-right axis determination. This protein interacts with nephrocystin and infers a connection between primary cilia function and left-right axis determination. A similar protein in mice interacts with calmodulin. Mutations in this gene have been associated with nephronophthisis type 2. Multiple transcript variants encoding distinct isoforms have been identified for this gene. [provided by RefSeq, May 2012]

Product images:



Circular map for RC219937



Western blot validation of overexpression lysate (Cat# [LY405240]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219937 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).