

Product datasheet for **RC213573**

CACTIN (NM_021231) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CACTIN (NM_021231) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CACTIN
Synonyms:	C19orf29; fSAPc; NY-REN-24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC213573 representing NM_021231
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGTCGGGACACAGCTCGCGCTCGCGGTCCGCGGGTCGCGGGGCCAAGGCGGCAGAGTCAGAGCG
 GGAGCCGAAGTCGGAGCAGGAGCCATGGGCGGCCAAACCAGCGCGCCGGGAGGACGAGGGACGGCGCAG
 ACGGAGCGCGGAGCCGGGAGCGCAGGTTCAGATTTCAGAGGAAGAGCGGTGGCAGCGCTCAGGGATGCGA
 AGCCGGAGCCCCCGCGGCCAAGTGGCACTCAAGAGATGGGTCTCTCAGTCGGACTCAGGAGAGGAGC
 AGTCACGGGGCCAGTGGGCTCGCCGGGACGGCGCGCACGCTCGTGGTCTCCTAGCTCCTCAGCATCCAG
 CTCCGCGTCTCCAGGGGATCCCAGAGCCCCGGGCGGCCGCGGTGCCCTGAGCCAGCAGCAGAGCCTG
 CAGGAGCGGCTGCGGCTGCGGGAGGAGCGGAAGCAGCAGGAGGAGCTGATGAAGGCCTTCGAGACGCCCC
 AGGAGAAGCGCGCACGGCGGCTGGCCAAGAAGGAGGCCAAGGAGCGCAAGAAGCGGGAGAAGATGGGCTG
 GGGTGAGGAGTACATGGGCTACACCAACACCGACAACCCCTTCGGAGACAACAACCTGCTGGGCACCTTC
 ATCTGGAATAAGGCCCTGGAGAAGAAGGGGATCAGCCACCTGGAGGAGAAGGAGCTGAAGGAGCGGAACA
 AGAGGATCCAGGAGGACAACCGGCTGGAGCTGCAGAAGGTGAAGCAGCTGCGGCTGGAGCGGGAGCGGGA
 GAAGGCCATGCGCGAGCAGGAGCTGGAGATGCTGCAGCGCGAGAAGGAGGAGCAGCACTTCAAGACATGG
 GAGGAGCAGGAGGACAACCTCCACCTCCAGCAGGCCAAGCTGCGTTCCAAGATCCGCATCCGGGACGGGC
 GGGCCAAGCCATCGACCTGCTGGCCAAGTACATCAGCGCTGAGGATGACGATCTGGCCGTGGAGATGCA
 TGAGCCCTACAGTTCCTCAACGGCCTCACCGTGGCCGACATGGAGGACCTGCTGGAGGATATCCAGGTC
 TACATGGAGCTGGAGCAGGGCAAGAACGCCGACTTCTGGCGGGACATGACCACCATCACCGAGGAGGAGA
 TCTCCAAGCTCCGAAGCTGGAGCCTCGGGCAAGGGGCCAGGTGAGCGCCGCGAGGGGGTCAACGCCTC
 CGTCAGCTCTGATGTGCAGTCGGTGTCAAGGGGAAGACATAACAACCAGCTGCAGGTCATCTCCAGGGC
 ATCGAGGGCAAAAATCCGCGCTGGTGGCCCCAACCTGGACATGGGCTACTGGGAGAGCCTCCTGCAGCAGC
 TTCGTGCCACATGGCACGGGCCCGGCTGCGTGAGCGCCACCAGGACGTGCTGCGGCAGAAGCTGTACAA
 ACTGAAGCAGGAGCAGGGCGTGGAGAGCGAGCCGCTGTTCCCATCCTCAAGCAGGAGCCCCAGTCCCCC
 AGCCGAGCCTGGAGCCTGAGGACGCGGCCACCCCGCCGGGCCCTCCTCGGAGGGCGGCCCGCGG
 AGGCCGAGGTGGACGGCGGACCCCGACAGAGGGCGACGGCGACGGGGACGGTGGGGCGAGGGCGAGGG
 CGAGGCGGTGCTCATGGAGGAGGACCTGATCCAGCAGAGCCTGGACGACTACGACGCCGGCAGGTACAGC
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 CCGGCGGGCCAAGGAGGGCATGGGCCAGGACGAGGCGCAGTTCAGCGTGGAGATGCCACTCACCGCAAG
 GCCTACCTGTGGGCCGACAAGTACCGGCCACGCAAGCCGCGCTTCTTCAACCGCGTGCACACGGGCTTCG
 AGTGGAACAAGTACAACCAGACGCACTACGACTTTGACAACCCACCGCCAAGATCGTGCAGGGATACAA
 GTTCAACATCTTCTACCCGACCTCATCGACAAGCGCTCCACGCCCGAGTACTTCTGGAGGCTGCGCC
 GACAACAAGGATTTCCGCATCCTGCGCTTCCACGCGGGGCCCGCCTACGAGGACATCGTTCAGATCG
 TCAACCGGAGTGGGAATACTCGCACCGCCACGGCTCCGCTGCCAGTTTGCCAACGGCATCTTCCAGCT
 GTGGTTCACTTCAAGCGCTACCGCTATCGGCGG

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC213573 representing NM_021231
Red=Cloning site Green=Tags(s)

MGRDTRSRSRSAGRRGRRRQSGSRSRSRSHGRRNRRRREDEGRRRRRRSRERRSDSEERWQRSGMR
 SRSPRPKWHSRDSSQSDSGEEQSRGQWARRRRRARSWSPSSASSASPGRSQSPRAAAAALSQQSL
 QERLRLREERKQQEELMKAFETPEEKRRRLAKKEAKERKKREKMGWGEEMGYTNTDNPFQDNNLLGTF
 IWNKALEKKGISHLEEKELKERNKRIQEDNRLLELQKVKQLRLEREREKAMREQELEMLQREKEAEHFKTW
 EEQEDNFHLQQAALRISKIRIRDGRAKPIDLLAKYISAEDDDLAVEMHEPYTFLNGLTVADMEDLLEDIQV
 YMELEQGNADFWRDMMTITEDI SKLRKLEASGKGPGERREGVNASVSSDVQSVFKGKTYNQLQVIFQG
 IEGKIRAGGNLDMGYWESLLQQLRAHMARARLRERHQDVLRLQKLYKQEQGVESEPLFPILKQEPQSP
 SRSLEPEDAAPTTPGPSSEGGPAEAEVDGATPTEGDDGDGEGEGEAVLMEEDLIQQSLDDYDAGRYS
 PRLLTAEHLPLDAHVLEPDEDLQRLQLSRQQLQVTGDASEAEDIFFRAKEGMGQDEAQFVEMPLTGK
 AYLWADKYRPRKPRFFNRVHTGFENKYNQTHYDFDNPPPKIVQGYKFNIFYPDLIDKRSTPEYFLEACA
 DNKDFAILRFHAGPPYEDIAFKIVNREWEYSHRHGFRQCQFANGIFQLWFHFKRYRYRR

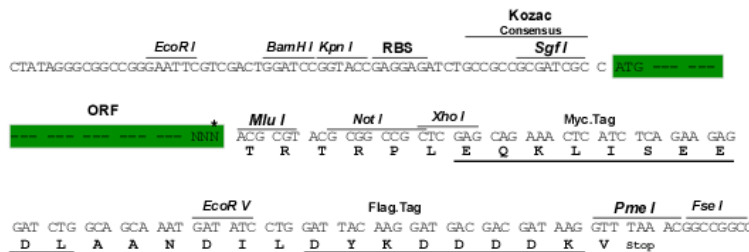
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4049_e01.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_021231

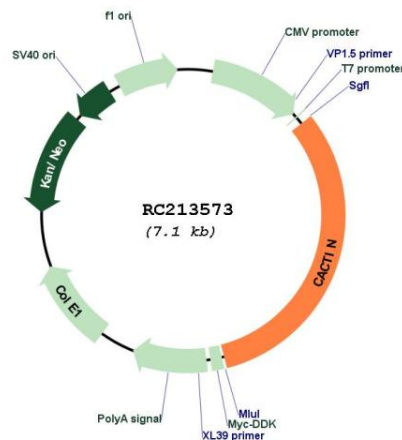
ORF Size: 2274 bp

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](#)

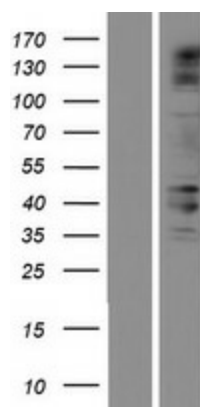
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	<u>NM_021231.1, NP_067054.1</u>
RefSeq Size:	2689 bp
RefSeq ORF:	2277 bp
Locus ID:	58509
UniProt ID:	<u>Q8WUQ7</u>
Cytogenetics:	19p13.3
MW:	88.5 kDa
Gene Summary:	Involved in the regulation of innate immune response. Acts as negative regulator of Toll-like receptor and interferon-regulatory factor (IRF) signaling pathways. Contributes to the regulation of transcriptional activation of NF-kappa-B target genes in response to endogenous proinflammatory stimuli. May play a role during early embryonic development. Probably involved in pre-mRNA splicing.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC213573



Western blot validation of overexpression lysate (Cat# [LY421097]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC221444] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).