

Product datasheet for RC229135

CHAC1 (NM 024111) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CHAC1 (NM_024111) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: CHAC1

Mammalian Cell Neomycin

Selection:

Vector:

pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide >RC229135 representing NM_024111

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com Protein Sequence: >RC229135 representing NM_024111

Red=Cloning site Green=Tags(s)

MGGAQLELPSGARPGVCVRRSFRAHAGDQPRRPPGPIPVPGTMKQESAAPNTPPTSQSPTPSAQFPRNDG DPQALWIFGYGSLVWRPDFAYSDSRVGFVRGYSRRFWQGDTFHRGSDKMPGRVVTLLEDHEGCTWGVAYQ VQGEQVSKALKYLNVREAVLGGYDTKEVTFYPQDAPDQPLKALAYVATPQNPGYLGPAPEEAIATQILAC RGFSGHNLEYLLRLADFMQLCGPQAQDEHLAAIVDAVGTMLPCFCPTEQALALV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



| Ecol CTATAGGGCGGCCGGGAAT | R/ TCGTCGAC | | HIKE | | RB | S Agat | - CTGC | Co | ozac nsens Sg GCGA | us f | : c 2 | YTG - | | |
|-------------------------------|----------------|----------------------|----------|----------------|--------------------|-----------|------------|----------|-----------------------------|----------|--------------|-------------|------------|----------|
| ORF | | Mlu I CG CGT R | ACG | No CGG R | | _ | hol GAG | CAG Q | AAA K | | Tag ATG | TCF S | A GAA E | gag E |
| GAT CTG GCA GCA AAT D L A A N | GAT AT | | GAT D | | Flag.1 AAG K | - | GAC D | GAC D | GAT D | AAG K | GTT V | TAA stop | ACGG | se I |

^{*} The last codon before the Stop codon of the ORF

ACCN: NM 024111

ORF Size: 792 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at customercom or by

calling 301.340.3188 option 3 for pricing and delivery.

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

variants is recommended prior to use. <u>More info</u>

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: <u>NM 024111.4</u>

 RefSeq ORF:
 669 bp

 Locus ID:
 79094

 UniProt ID:
 Q9BUX1

 Cytogenetics:
 15q15.1

 Domains:
 ChaC

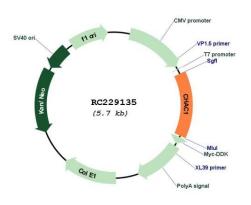
 MW:
 28.6 kDa

Gene Summary: This gene encodes a member of the gamma-glutamylcyclotransferase family of proteins. The

encoded protein has been shown to promote neuronal differentiation by deglycination of the Notch receptor, which prevents receptor maturation and inhibits Notch signaling. This protein may also play a role in the unfolded protein response, and in regulation of glutathione levels and oxidative balance in the cell. Elevated expression of this gene may indicate increased risk of cancer recurrence among breast and ovarian cancer patients. [provided by RefSeq, Sep

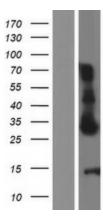
2016]

Product images:



Circular map for RC229135





Western blot validation of overexpression lysate (Cat# [LY432159]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229135 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).