

## **Product datasheet for RC204427**

## NNT1 (CLCF1) (NM 013246) Human Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: NNT1 (CLCF1) (NM\_013246) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: NNT1

Synonyms: BSF-3; BSF3; CISS2; CLC; NNT-1; NNT1; NR6

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC204427 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC204427 protein sequence

Red=Cloning site Green=Tags(s)

MDLRAGDSWGMLACLCTVLWHLPAVPALNRTGDPGPGPSIQKTYDLTRYLEHQLRSLAGTYLNYLGPPFN EPDFNPPRLGAETLPRATVDLEVWRSLNDKLRLTQNYEAYSHLLCYLRGLNRQAATAELRRSLAHFCTSL QGLLGSIAGVMAALGYPLPQPLPGTEPTWTPGPAHSDFLQKMDDFWLLKELQTWLWRSAKDFNRLKKKMQ

PPAAAVTLHLGAHGF

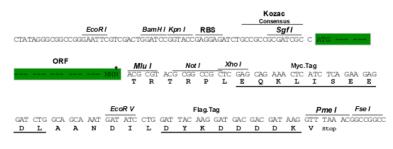
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6025">https://cdn.origene.com/chromatograms/mk6025</a> h03.zip

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_013246

ORF Size: 675 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:** 

- 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 013246.3</u>

RefSeq Size: 1860 bp
RefSeq ORF: 678 bp
Locus ID: 23529

UniProt ID: Q9UBD9

Cytogenetics: 11q13.2

**Protein Families:** Druggable Genome, Secreted Protein

**Protein Pathways:** Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway

MW: 25.2 kDa

**Gene Summary:** This gene is a member of the glycoprotein (gp)130 cytokine family and encodes

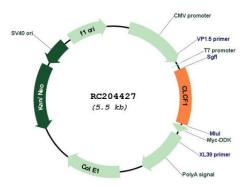
cardiotrophin-like cytokine factor 1 (CLCF1). CLCF1 forms a heterodimer complex with cytokine receptor-like factor 1 (CRLF1). This dimer competes with ciliary neurotrophic factor (CNTF) for binding to the ciliary neurotrophic factor receptor (CNTFR) complex, and activates the Jak-STAT signaling cascade. CLCF1 can be actively secreted from cells by forming a complex with soluble type I CRLF1 or soluble CNTFR. CLCF1 is a potent neurotrophic factor, B-cell stimulatory agent and neuroendocrine modulator of pituitary corticotroph function. Defects in CLCF1 cause cold-induced sweating syndrome 2 (CISS2). This syndrome is characterized by a profuse sweating after exposure to cold as well as congenital physical

abnormalities of the head and spine. Alternative splicing results in multiple transcript variants

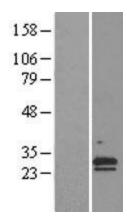
encoding distinct isoforms.[provided by RefSeq, Oct 2009]



## **Product images:**

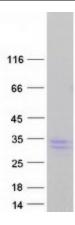


Circular map for RC204427



Western blot validation of overexpression lysate (Cat# [LY402229]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204427 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified CLCF1 protein (Cat# [TP304427]). The protein was produced from HEK293T cells transfected with CLCF1 cDNA clone (Cat# RC204427) using MegaTran 2.0 (Cat# [TT210002]).