

## Product datasheet for RC217759

### LIGHT (TNFSF14) (NM\_003807) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LIGHT (TNFSF14) (NM_003807) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LIGHT
Synonyms:	CD258; HVEML; LIGHT; LTg
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC217759 representing NM_003807 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGGAGAGTGTCGTACGGCCCTCAGTGTTTGTGGTGGATGGACAGACCGACATCCCATTACGAGGC  
TGGGACGAAGCCACCGGAGACAGTCGTGCAGTGTGGCCCGGGTGGGTCTGGGTCTCTTGCTGTTGCTGAT  
GGGGCCGGCTGGCCGTCCAAGGCTGGTTCCTCCTGCAGCTGCACTGGCGTCTAGGAGAGATGGTCACC  
CGCCTGCCTGACGGACCTGCAGGCTCCTGGGAGCAGCTGATACAAGAGCGAAGGTCTCACGAGGTCAACC  
CAGCAGCGCATCTCACAGGGCCAACCTCAGCTTGACCGGCAGCGGGGGCCGCTGTTATGGGAGACTCA  
GCTGGGCCTGGCCTTCTGAGGGCCTCAGCTACCACGATGGGGCCCTTGTGGTACCAAAGCTGGCTAC  
TACTACATCTACTCCAAGGTGCAGCTGGGCGGTGTGGGCTGCCCGCTGGGCTGGCCAGCACCATCACCC  
ACGGCCTCTACAAGCGCACACCCCGCTACCCCGAGGAGCTGGAGCTGTTGGTCAGCCAGCAGTCACCCTG  
CGGACGGGCCACCAGCAGCTCCCGGTCTGGTGGGACAGCAGCTTCTGGGTGGTGTGGTACACCTGGAG  
GCTGGGGAGAAGGTGGTCCGTGCTGGATGAACGCCTGGTTCGACTGCGTGATGGTACCCGGTCTT  
ACTCGGGGCTTTCATGGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC217759 representing NM\_003807  
Red=Cloning site Green=Tags(s)

MEESVVRPSVFVVDGQTDIPFTRLGRSHRRQSCSVARVGLGLLLLLMGAGLAVQGWFLQLHWRLGEMVT  
 RLPDGPAGSWEQLIQERRSHEVNPAAHLTGANSSLTGGGPLLWETQLGLAFLRGLSYHDGALVVTKAGY  
 YYIYSKVQLGGVGCPLGLASTITHGLYKRTPRYPEELELLVSQQSPCGRATSSSRVWDDSSFLGGVVHLE  
 AGEKVVVRVLDERLVRDRDGRSYFGAFMV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6106\\_f08.zip](https://cdn.origene.com/chromatograms/mk6106_f08.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_003807

**ORF Size:** 720 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:** [NM\\_003807.4](#)

**RefSeq Size:** 1491 bp

**RefSeq ORF:** 723 bp

**Locus ID:** 8740

**UniProt ID:** [O43557](#)

**Cytogenetics:** 19p13.3

**Domains:** TNF

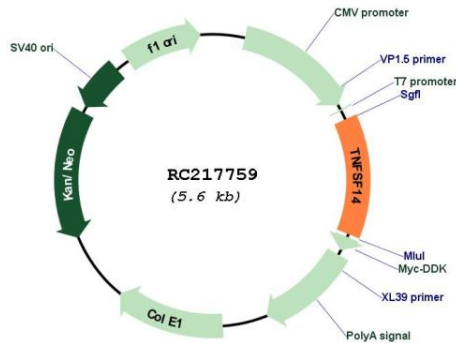
**Protein Families:** Druggable Genome, Secreted Protein, Transmembrane

**Protein Pathways:** Cytokine-cytokine receptor interaction

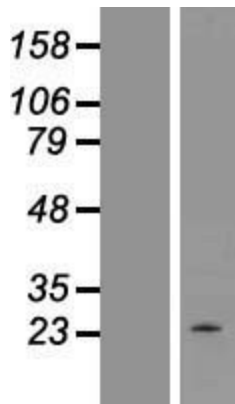
**MW:** 26.35 kDa

**Gene Summary:** The protein encoded by this gene is a member of the tumor necrosis factor (TNF) ligand family. This protein is a ligand for TNFRSF14, which is a member of the tumor necrosis factor receptor superfamily, and which is also known as a herpesvirus entry mediator (HVEM). This protein may function as a costimulatory factor for the activation of lymphoid cells and as a deterrent to infection by herpesvirus. This protein has been shown to stimulate the proliferation of T cells, and trigger apoptosis of various tumor cells. This protein is also reported to prevent tumor necrosis factor alpha mediated apoptosis in primary hepatocyte. Two alternatively spliced transcript variant encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]

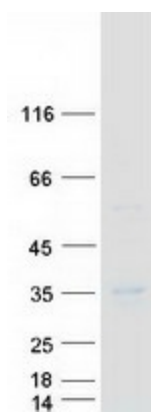
Product images:



Circular map for RC217759



Western blot validation of overexpression lysate (Cat# [LY418409]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217759 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TNFSF14 protein (Cat# [TP317759]). The protein was produced from HEK293T cells transfected with TNFSF14 cDNA clone (Cat# RC217759) using MegaTran 2.0 (Cat# [TT210002]).