

Product datasheet for **RG220370**

LIGHT (TNFSF14) (NM_172014) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: LIGHT (TNFSF14) (NM_172014) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: LIGHT
Synonyms: CD258; HVEML; LIGHT; LTg
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG220370 representing NM_172014
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGGAGAGTGTCTGACGGCCCTCAGTGTGGTGGATGGACAGACCGACATCCCATTACGAGGC
TGGGACGAAGCCACCGAGACAGTCGTGCAGTGTGGCCCGGACGGACCTGCAGGCTCCTGGGAGCAGCT
GATACAAGAGCGAAGGTCTCACGAGGTCAACCCAGCAGCGCATCTCACAGGGCCAACCTCCAGCTTGACC
GGCAGCGGGGGCCGCTGTTATGGGAGACTCAGCTGGCCCTGGCCTTCTGAGGGGCTCAGCTACCAGC
ATGGGGCCCTTGTGGTCACCAAAGCTGGCTACTACTACATCTACTCCAAGGTGCAGCTGGGCGGTGTGGG
CTGCCCGCTGGGCTGGCCAGCACCATCACCCAGGCCTCTACAAGCGCACACCCCGCTACCCCGAGGAG
CTGGAGCTGTTGGTCAGCCAGCAGTCACCTGCGGACGGGCCACCGAGCTCCCGGTCTGGTGGGACA
GCAGCTTCTGGGTGGTGTGGTACACCTGGAGGCTGGGGAGAAGGTGGTCCGTCCGTGTGCTGGATGAACG
CCTGGTTCGACTGCGTGATGGTACCCGGTCTTACTTCGGGGCTTTCATGGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG220370 representing NM_172014
Red=Cloning site Green=Tags(s)

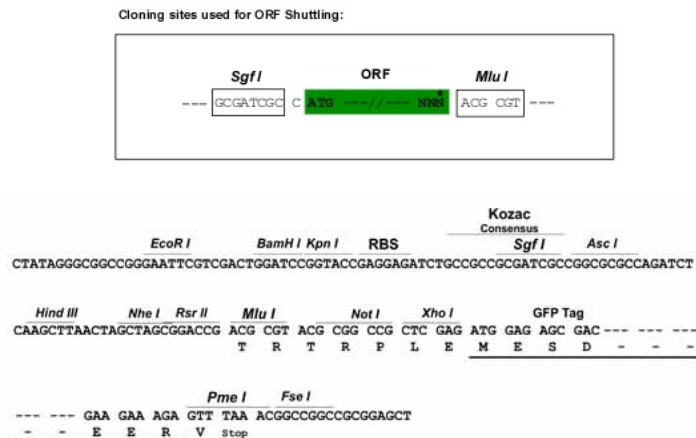
MEESVVRPSVFVVDGQTDIPFTRLGRSHRRQSCSVARDGPAGSWEQLIQERRSHEVNPAHLTGANSSLT
GSGGPLLWETQLGLAFLRGLSYHDGALVVTKAGYYYIYSKVQLGGVGCPLGLASTITHGLYKTRPRYPEE
LELLVSQQSPCGRATSSSRVWDSFLLGGVVHLEAGEKVVVRVLDERLVRDRDGRSRYFGAFMV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_172014

ORF Size: 612 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_172014.3](#)

RefSeq Size: 2786 bp

RefSeq ORF: 615 bp

Locus ID: 8740

UniProt ID: [O43557](#)

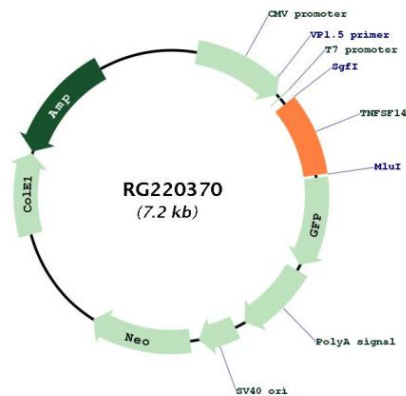
Cytogenetics: 19p13.3

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction

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 RG220370