

Product datasheet for RC222242

Flt3 ligand (FLT3LG) (NM_001459) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Flt3 ligand (FLT3LG) (NM_001459) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Flt3 ligand
Synonyms:	FL; FLG3L; FLT3L
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222242 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACAGTGTGGCGCCAGCCTGGAGCCCAACGACCTATCTCCTCTGCTGCTGCTGAGCTCGGGAC
TCAGTGGGACCCAGGACTGCTCCTTCCAACACAGCCCCATCTCCTCCGACTTCGCTGTCAAATCCGTGA
GCTGTCTGACTACCTGCTTCAAGATTACCCAGTCACCGTGGCCTCCAACCTGCAGGACGAGGAGCTCTGC
GGGGCCCTCTGGCGGCTGGTCTGGCACAGCGCTGGATGGAGCGGCTCAAGACTGTCTGGTCCAAGA
TGCAAGGCTTGTGGAGCGGTGAACACGGAGATACACTTTGTACCAAATGTGCCTTTAGCCCCCCCC
CAGCTGTCTTCGCTTCGTCAGACCAACATCTCCCGCTCCTGCAGGAGACCTCCGAGCAGCTGGTGGCG
CTGAAGCCCTGGATCACTCGCCAGAACTTCTCCCGGTGCCTGGAGCTGCAGTGTGACGCCGACTCCTCAA
CCCTGCCACCCCATGGAGTCCCCGGCCCTGGAGGCCACAGCCCCGACAGCCCCGAGCCCCCTCTGCT
CCTCCTACTGCTGCTGCCGTGGGCTCCTGCTGCTGGCCGCTGCCTGGTGCCTGCAGTGGCAGAGGACG
CGGCGGAGGACACCCCGCCTGGGAGCAGGTGCCCCCGTCCCCAGTCCCAGGACCTGCTGCTTGTGG
AGCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222242 protein sequence
 Red=Cloning site Green=Tags(s)

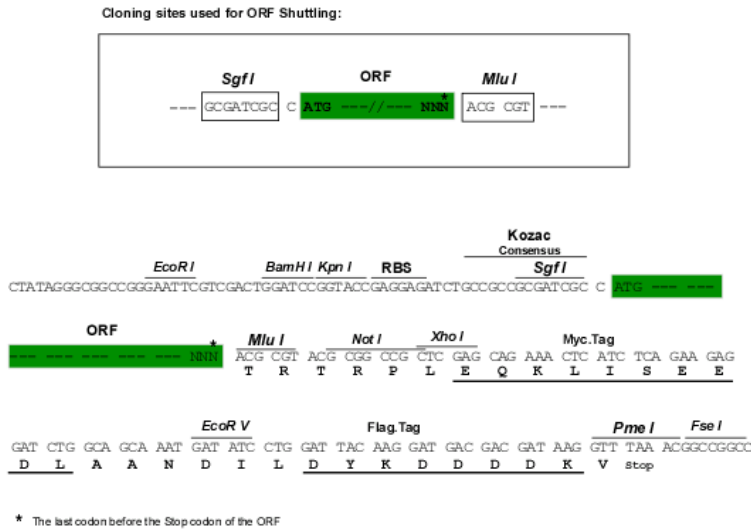
MTVLAPAWSPTTYLLLLLLLLSSGLSGTQDCSFQHSPISSDFAVKIRELSDYLLQDYPTVASNLQDEELC
 GGLWRLVLAQRWMERLKTAVAGSKMQGLLERVNTIEIHFVTKCAFQPPPSCLRFVQTNISRLQLQETSEQLVA
 LKPWITRQNF SRCLELQCQPDSSSTLPPWSPRPLEATAPTAPQPPLLLLLLLLLPVGLLLLLAAAWCLHWQRT
 RRRTPRPGEQVPPVPSQDLLLLVEH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6604_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001459

ORF Size: 705 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_001459.4](#)

RefSeq Size: 1074 bp

RefSeq ORF: 708 bp

Locus ID: 2323

UniProt ID: [P49771](#)

Cytogenetics: 19q13.33

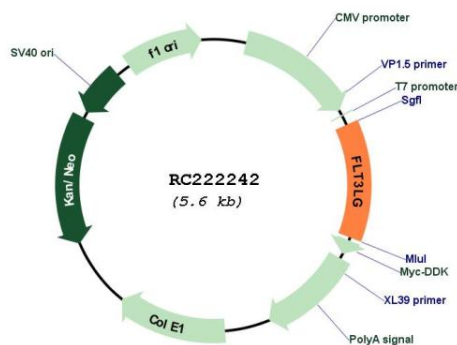
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transmembrane

Protein Pathways: Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Pathways in cancer

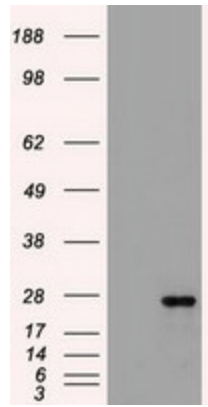
MW: 26.4 kDa

Gene Summary: Dendritic cells (DCs) provide the key link between innate and adaptive immunity by recognizing pathogens and priming pathogen-specific immune responses. FLT3LG controls the development of DCs and is particularly important for plasmacytoid DCs and CD8 (see MIM 186910)-positive classical DCs and their CD103 (ITGAE; MIM 604682)-positive tissue counterparts (summary by Sathaliyawala et al., 2010 [PubMed 20933441]).[supplied by OMIM, Jan 2011]

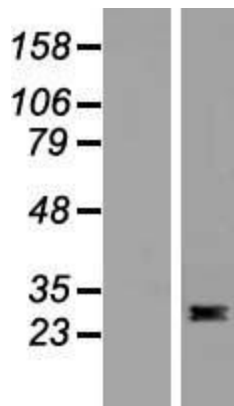
Product images:



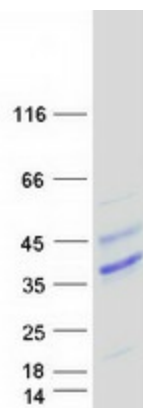
Circular map for RC222242



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FLT3LG (Cat# RC222242, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FLT3LG (Cat# [TA500274]). Positive lysates [LY419927] (100ug) and [LC419927] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419927]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222242 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FLT3LG protein (Cat# [TP322242]). The protein was produced from HEK293T cells transfected with FLT3LG cDNA clone (Cat# RC222242) using MegaTran 2.0 (Cat# [TT210002]).