OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC203296

Ferritin Light Chain (FTL) (NM_000146) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ferritin Light Chain (FTL) (NM_000146) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ferritin Light Chain
Synonyms:	LFTD; NBIA3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC203296 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCTCCCAGATTCGTCAGAATTATTCCACCGACGTGGAGGCAGCCGTCAACAGCCTGGTCAATTTGT
ACCTGCAGGCCTCCTACACCTACCTCTCTCTGGGCTTCTATTTCGACCGCGATGATGTGGCTCTGGAAGG
CGTGAGCCACTTCTTCCGCGAACTGGCCGAGGAGAAGCGCGAGGGCTACGAGCGTCTCCTGAAGATGCAA
AACCAGCGTGGCGGCCGCGCTCTCTTCCAGGACATCAAGAAGCCAGCTGAAGATGAGTGGGGTAAAACCC
CAGACGCCATGAAAGCTGCCATGGCCCTGGAGAAAAAGCTGAACCAGGCCCTTTTGGATCTTCATGCCCT
GGGTTCTGCCCGCACGGACCCCCATCTCTGTGACTTCCTGGAGACTCACTTCCTAGATGAGGAAGTGAAG
CTTATCAAGAAGATGGGTGACCACCTGACCAACCTCCACAGGCTGGGTGGCCCGGAGGCTGGGCTGGGCG
AGTATCTCTTCGAAAGGCTCACTCTCAAGCACGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC203296 protein sequence
Red=Cloning site Green=Tags(s)

MSSQIRQNYSTDVEAAVNSLVNLYLQASYTYLSLGFYFDRDDVALEGVSHFFRELAEEKREGYERLLKMQ
NQRGGRALFQDIKKPAEDEWGKTPDAMKAAMALEKKLNQALLDLHALGSARTDPHLCDFLETHFLDEEVK
LIKKMGDHLTNLHRLGGPEAGLGEYLFERLTLKHD

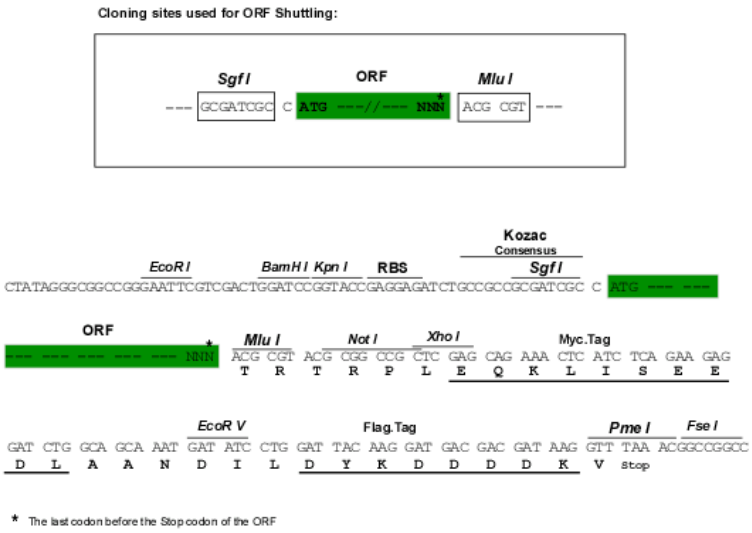
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6145_h11.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000146

ORF Size: 525 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

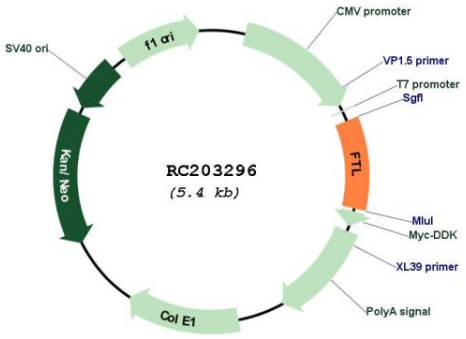
RefSeq: NM_000146.4

RefSeq Size: 889 bp

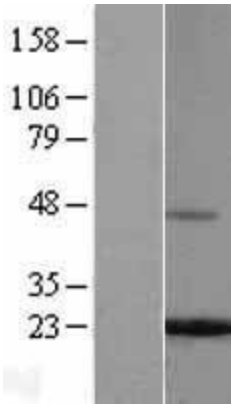
RefSeq ORF: 528 bp

Locus ID:	2512
UniProt ID:	P02792
Cytogenetics:	19q13.33
Domains:	ferritin
Protein Families:	Druggable Genome
MW:	20 kDa
Gene Summary:	This gene encodes the light subunit of the ferritin protein. Ferritin is the major intracellular iron storage protein in prokaryotes and eukaryotes. It is composed of 24 subunits of the heavy and light ferritin chains. Variation in ferritin subunit composition may affect the rates of iron uptake and release in different tissues. A major function of ferritin is the storage of iron in a soluble and nontoxic state. Defects in this light chain ferritin gene are associated with several neurodegenerative diseases and hyperferritinemia-cataract syndrome. This gene has multiple pseudogenes. [provided by RefSeq, Jul 2008]

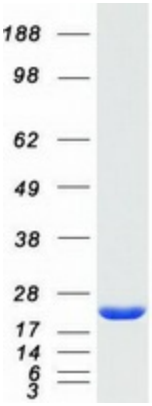
Product images:



Circular map for RC203296



Western blot validation of overexpression lysate (Cat# [LY400051]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203296 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified FTL protein (Cat# [TP303296]). The protein was produced from HEK293T cells transfected with FTL cDNA clone (Cat# RC203296) using MegaTran 2.0 (Cat# [TT210002]).