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Product datasheet for RC213412

Filensin (BFSP1) (NM_001195) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Filensin (BFSP1) (NM_001195) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Filensin
Synonyms:	CP94; CP115; CTRCT33; LIFL-H
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC213412 representing NM_001195
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTACCGGCGCAGCTACGTCTTCCAGACCCGCAAGGAGCAGTACGAGCACGCCGACGAGGCTTCGCGCG
CCGCCGAGCCCGAGCGCCCGGCCGACGAGGGCTGGGCTGGGGCAACGAGCCTGGCGGCGCTGCAGGGGCT
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GCAACCGCCAGCGCGTCCGGGACCTGGAGGCCGAGCGCGCCCGGCTGGAGCGCCAGGGCACCGAGGCGCA
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CAGCATCCTGCAGCAGATCATCCACACCACTCCTCCAGCATCCATTGTGACGAGTGGGATGAGGGAGGAG
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GCTAAAGGTGGGGTGGCTGTTTCTGTTGCGGAAGACTCTGTGCTTTATGACGGCCAGGTGGAGCCCTCTC
CTGAGTCACCCAAGCCCCCTTTAGAGAATGGGCAGGTGGGTCTGCAGGAGAAAGAAGATGGACAACCAAT
TGACCAGCAGCCTATAGACAAGGAGATTGAGCCAGATGGTGCAGAGCTGGAAGGCCCTGAAGAGAAACGT
GAGGGTGAGGAGCGGGACGAAGAGTCCAGGAGACCCTGTGCCATGGTCACACCCGGTGCAGAGGAACCAT
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ATTTCCACGGAGAGCATTCAGACATATGAAGAAACCGCTGTGATCGTGGAGACCATGATTGGAAAGACAA
AGTCAGACAAGAAGAAATCAGGAGAGAAGAGCTCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213412 representing NM_001195
Red=Cloning site Green=Tags(s)

MYRRSYVFQTRKEQYEHADEASRAAEPERPADEGWAGATSLAALQGLGERVAAHVQRARALEQRHAGLRR
QLDAFQRLGELAGPEDALARQVESNRQRVRDLEAERARLERQGTEAQRALDEFRSKYENECECQLLLKEM
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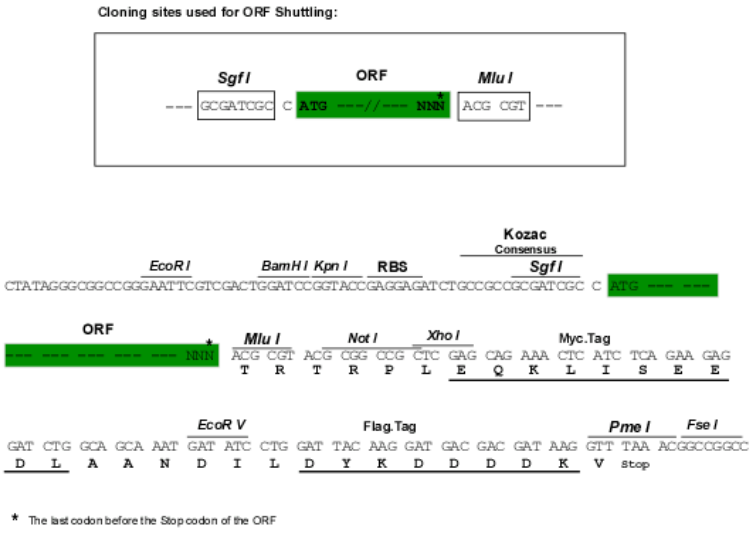
KLLTEREVAALRSQLEEGREVLSHLQAQRVELQAQTTTLEQAIKSAHECYDDEIQLYNEQIETLRKEIEE
TERVLEKSSYDCRQLAVAQQTLKNELDRYHRIIEIEGNRLTSAFIETPIPLFTQSHGVSLSTGSGGKDLT
RALQDITAAKPRQKALPKNVPRRKEIITKDKTNGALEDAPLKGLEDTKLVQVVLKEESESKFESESKEVS
PLTQEGAPEDVPDGGQISKGFGKLYRKVKEKVRSPKEPETPTELYTKERHVLVTGDANYVDPRFYVSSIT
AKGGVAVSVAEDSVLYDGQVEPSPESPKPPLENGQVGLQEKEDGQPIDQQPIDKEIEPDGAELEGPEEKR
EGEERDEESRRPCAMVTPGAEEPSIPEPPKPAADQDGAEVLGTRSRSLPEKGPPKALAYKTVEVVESIEK
ISTESIQTYEETAVIVETMIGKTKSDKKKSGEKSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8023_h07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001195

ORF Size: 1995 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_001195.5

RefSeq Size: 2176 bp

RefSeq ORF: 1998 bp

Locus ID: 631

UniProt ID: Q12934

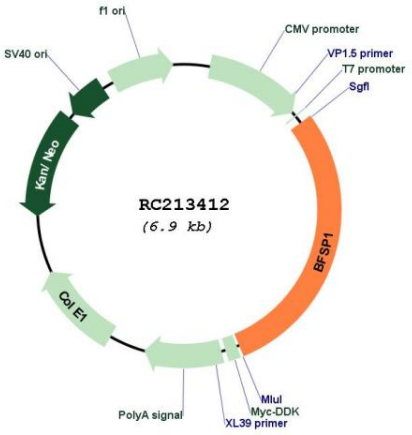
Cytogenetics: 20p12.1

Domains: filament

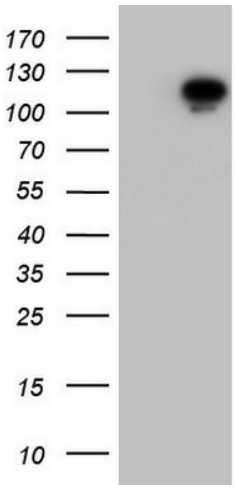
MW: 74.4 kDa

Gene Summary: This gene encodes a lens-specific intermediate filament-like protein named filensin. The encoded protein is expressed in lens fiber cells after differentiation has begun. This protein functions as a component of the beaded filament which is a cytoskeletal structure found in lens fiber cells. Mutations in this gene are the cause of autosomal recessive cortical juvenile-onset cataract. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jul 2013]

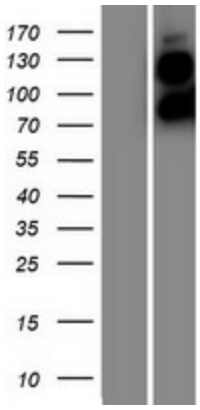
Product images:



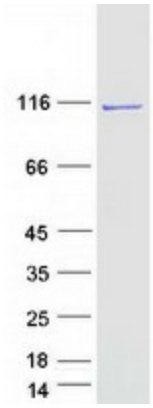
Circular map for RC213412



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY BFSP1 (Cat# RC213412, 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-BFSP1(Cat# [TA804071]). Positive lysates [LY420073] (100ug) and [LC420073] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY420073]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213412 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified BFSP1 protein (Cat# [TP313412]). The protein was produced from HEK293T cells transfected with BFSP1 cDNA clone (Cat# RC213412) using MegaTran 2.0 (Cat# [TT210002]).