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Product datasheet for RC212577

Espin (ESPN) (NM_031475) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Espin (ESPN) (NM_031475) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Espin
Synonyms:	DFNB36; LP2654; USH1M
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC212577 representing NM_031475
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCCTGGAGCAGGCGCTGCAGGCGGCGCGGCAGGGCGAGCTGGACGTGCTGAGGTCGCTGCACGCCG
CAGGCCTCCTGGGGCCCTCGCTGCGCGACCCGCTGGACGCGCTGCCCGTGCACCACGCGGCCCGCGCTGG
GAAGCTGCACTGTCTGCGCTTCCTGGTGGAGGAAGCCGCCCTCCCCGCCGCGGCCCGCGCCCGCAACGGC
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CCAGCACGGGGGACTACTACCGGCAGCTGGGCCGCTGCCCCGGCGAGACGCTGGCCGCACGCCCGGGCAT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC212577 representing NM_031475
Red=Cloning site Green=Tags(s)

MALEQALQAARQGELDVLRSLHAAGLLGPSLRDPLDALPVHHAARAGKLHCLRFLVEEAALPAAARARNG
ATPAHDASATGHLACLQWLLSQGGCRVQDKDNSGATVLHLAARFGHPEVVNWLLHHGGGDPTAATDMGAL
PIHYAAAKGDFPSLRLLVEHYPEGVNAQTKNGATPLYLACQEGHLEVTQYLVQECGADPHARAHDGMTPL
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ENGELECCQILVVNGAELDVRDRDGYTAADLSDFNGHSHCTRYLRTVENLSVEHRVLSRDPSAELEAKQP
DSGMSSPNTTVSVQPLNFDLSSPTSTLSNYDSCSSSHSSIKGQHPPCGLSSARAADIQSYMDMLNPELGL
PRGTIGKPTPPPPPPSFPPPPPPPGTQLPPPPPGYPAPKPPVGPQAADIYMQTKNKLRHVETEALKKELS
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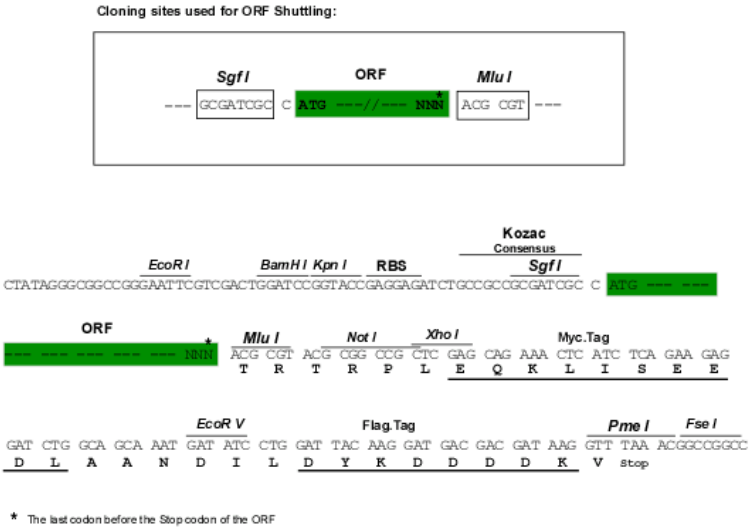
QRQVILKKGDIAKY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8023_f12.zip

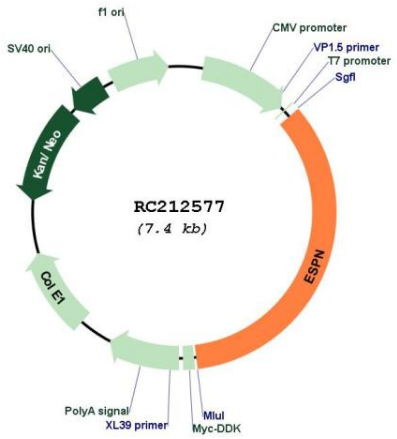
Restriction Sites: SgfI-MluI

Cloning Scheme:

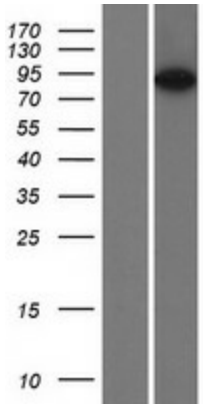


ACCN:	NM_031475
ORF Size:	2562 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_031475.3
RefSeq Size:	3542 bp
RefSeq ORF:	2565 bp
Locus ID:	83715
UniProt ID:	B1AK53
Cytogenetics:	1p36.31
MW:	91.6 kDa
Gene Summary:	This gene encodes a multifunctional actin-bundling protein. It plays a major role in regulating the organization, dimensions, dynamics, and signaling capacities of the actin filament-rich, microvillus-type specializations that mediate sensory transduction in various mechanosensory and chemosensory cells. Mutations in this gene are associated with autosomal recessive neurosensory deafness, and autosomal dominant sensorineural deafness without vestibular involvement. [provided by RefSeq, Nov 2009]

Product images:



Circular map for RC212577



Western blot validation of overexpression lysate (Cat# [LY410481]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212577 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified ESPN protein (Cat# [TP312577]). The protein was produced from HEK293T cells transfected with ESPN cDNA clone (Cat# RC212577) using MegaTran 2.0 (Cat# [TT210002]).