

Product datasheet for **MR224961**

Espn (NM_019585) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Espn (NM_019585) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Espn
Synonyms: je
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR224961 representing NM_019585
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGA**ACT**CCCAGGGCCCTCTAGGTGGGGCCATATACCCAGCACCAATCTTTCAACATGATGTCCCAA
CGGGTGATA**ACT**CAGAGCTTCTGGCTGAGATAAAGGCGGGCAAGAGCCTGAAGCCGACACCGCAGAGCAA
GGGGCTGACAACCGTGTCTCAGGCAGTGGCAGCCAGCCTCCAGGTAGGCACTGGCCGAGTGCCCGC
CCGGGCTCCAGTGCCTGCCAGTGCTCAGCCCTACTGCTTCTCCGGCAGCCTGAGTACCAGCAGCCTC
TGGTGTCACCTGCGCCATCTCGACTCGGAGCCCAACCCGCGCAGCCTCTGGGTCTCAGCCACTGCTCAA
TGGCAGTGTGGTCCCGCACACCTGCCACCCCGCACCTGGAGTCCATCTGGATGTGGAGCCCTCATT
CCCACTTTGATGAGCAGGGCCGCCATCCCGGAGTGAAGCGCCAGGTGATGGTCCGCAAGCTGCAGC
AGAAGATGCAGGAGGAAGAGGAGCAGCGGAGGAAGGAGGAAGAGGAGGAGGCCCGCTCGCCAGCCTGCC
TGCTTGGAGACGAGACATTTCTCGGAAGAAGCTGGAGGAGGAGAGGGAGCAGAAGCGAAAAGAGGAGGAG
CGGCAAAGCTGGAGGAAATACAGAGGGCGAAAGAACAGTCGGAGAAGCTGCGGACACTAGGCTACGACG
AAGCAAAGCTCGCGCCCTGGCAGCGACAGGTCACTTGAAGAAGGGGGAGATCCCTAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR224961 representing NM_019585
Red=Cloning site Green=Tags(s)

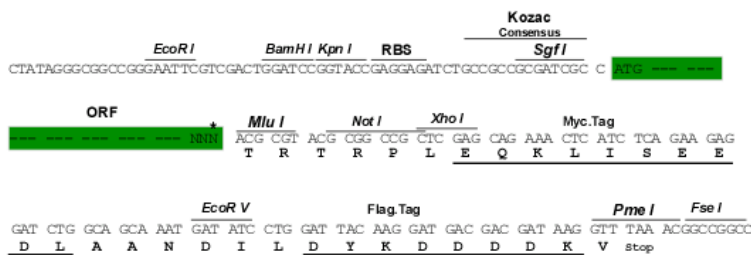
MNSQGPLGGGHIPSTKSFNMSPTGDNSELLAEIKAGKSLKPTPQSKGLTTVFSGSGQPASQVGTGRVPR
 PGSQCLPSAQPYCFSRQPESQPLVSPAPSRTRSPTPPASGSQPLLNGSVVPAPPATPAPGVHLDVEALI
 PTLDEQGRPIPEWKQVMVRKLQKMQEEEEQRRKEEEEEARLASLPAWRRDILRKKLEEEEREQKRKEEE
 RQKLEEIQRAKEQSEKLRTLGYDEAKLAPWQRQVILKKGEIPK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_019585

ORF Size: 759 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_019585.3](#), [NP_062531.2](#)

RefSeq Size: 1123 bp

RefSeq ORF: 762 bp

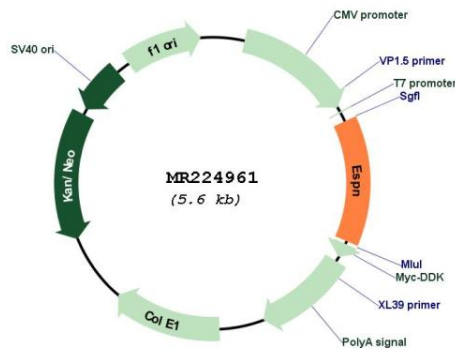
Locus ID: 56226

Cytogenetics: 4 82.9 cM

MW: 28.5 kDa

Gene Summary: Multifunctional actin-bundling protein. Plays a major role in regulating the organization, dimension, dynamics and signaling capacities of the actin filament-rich microvilli in the mechanosensory and chemosensory cells (PubMed:14657236, PubMed:15190118). Required for the assembly and stabilization of the stereociliary parallel actin bundles. Plays a crucial role in the formation and maintenance of inner ear hair cell stereocilia (PubMed:21455486). Involved in the elongation of actin in stereocilia (PubMed:19287378, PubMed:22264607). In extrastricular hair cells, required for targeting MYO3B to stereocilia tips, and for regulation of stereocilia diameter and staircase formation (PubMed:26926603).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224961