

## Product datasheet for **MR224960**

### Espn (NM\_207690) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Espn (NM_207690) 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)



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**ORF Nucleotide Sequence:**

>MR224960 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGCAATAGCTTGAACACCGAGTCTTGTCCCGGGATCAATCCATGGACCTGGAGGCAAGCAGCTGG  
 ACTCGGGTATGTCTCGCCAACACCACCATGTGGTCCAGCCAATGACCTTTGACCTGGGCTCGCCTAC  
 TAGCACGTTCTCCAATATGACTCCTGCTCCTCCAGTCACTCCAGCAGCAAGGGGAGCGATCGAATCGA  
 GGGATTCCAGGTGCAAGAGCTGCAGACTTACAGAGCTACATGGACATGCTGAACCCAGAGAAGAGCTTGC  
 CTCGGGGCAAGCTAGGGAAGCCTTCCCCGCCACCACCTCCACCACCACCACCACCAAGCTTCCCCGCCACC  
 CCCACCACCACAGGCACCCAGCCGCCCCACCTCCACCAGGCTACCCAGCTCCCAATCCCCCTGTGGGA  
 CTGCATCTGAATAACATTTACATGCAGACCAAGAACAAGCTTCGCCATGTGGAGGTGGACTCGCTCAAGG  
 AGGCGGGCTGCTCCCCGGGAACCAGTGCACAACGGCTGCTCAGCGGACTCAAAGCGTCCAGGGAGCT  
 GCCGCCGCCACCCGCCGCCCGCTGCCGAGGCCCTGAGTTCGCCGCCGCCGCCACCTCTGCC  
 ATCGAGGGCGCGGGCGCAGCCTGCGGGCAGCGTCTGTTCCCTCGTCTTCTACTGGCAGCACCAATCTTTCA  
 ACATGATGTCCCCAACGGGTGATAAECTCAGAGCTTCTGGCTGAGATAAAGCGGGCAAGAGCCTGAAGCC  
 GACACCGCAGAGCAAGGGGTGACAACCGTGTCTCAGGCAGTGGGCAGCCAGCCTCCCAGCCTGAGTCA  
 CCGCAGCCTCTGGTGTCACTGCGCCATCTCGGACTCGGAGCCCCACCCGCCAGCCTCTGGGTCTCAGC  
 CACTGCTCAATGGCAGTGTGGTCCCGGCCACCACCTGCCACCCCGGCACCTGGAGTCCATCTGGATGTGGA  
 GGCCCTCATTCCACTCTTGATGAGCAGGGCCGCCCATCCCGGAGTGAAGCGCCAGGTGATGGTCCGC  
 AAGCTGCAGCAGAAGATGCAGGAGGAAGAGGAGCAGCGGAGGAAGGAGGAAGAGGAGGAGGCCCGGCTCG  
 CCAGCTGCCTGCCTGGAGACGAGACATTTCTTCGGAAGAAGCTGGAGGAGGAGGAGGAGCAGAAGCGAAA  
 AGAGGAGGAGCGCAAAAGCTGGAGGAAAATACAGAGGGCGAAAGAACAGTCCGAGAAGCTGCGGACACTA  
 GGCTACGACGAAGCCAAGCTCGCCCTGGCAGCGACAGGTCATCTTGAAGAAGGGGAGATCCCTAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR224960 protein sequence  
 Red=Cloning site Green=Tags(s)

MGNSLEHRVLSRDQSMLEAKQLDSGMSSPNTTMSVQPMTFDLGSPTSTFSNYDSCSSSHSSSKGQRSNR  
 GIPGARAADLQSYMDMLNPEKSLPRGKLGKSPPPPPPPPPSFP PPPPTGTQPPPPPPGYAPNPPVG  
 LHLNNIYMQTKNKL RHVEVDSLKEAALLPGNHVHNGCSADSKASRELPPPPPPPLPEALSSPPPAPLP  
 IEGAGAACGQRRSSSTGSKSFNMMSP TGDNSELLAEIKAGKSLKPTPQSKGLTTVFSGSGQPASQPES  
 PQPLVSPAPSRTRSPTPPASGSQPLLNGSVVPAPPATPAPGVHLDVEAL IPTLDEQGRPIPEWKQVMVR  
 KLQQKMEEEEQRRKEEEEEEARLASLP AWRRDILRKKLEEEEREQKRKEEERQKLEEI QRAKEQSEKLR TL  
 GYDEAKLAPWQRQVILKKGEIPK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_207690

ORF Size: 1329 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\\_207690.2](#), [NP\\_997573.1](#)

RefSeq Size: 1620 bp

RefSeq ORF: 1332 bp

Locus ID: 56226

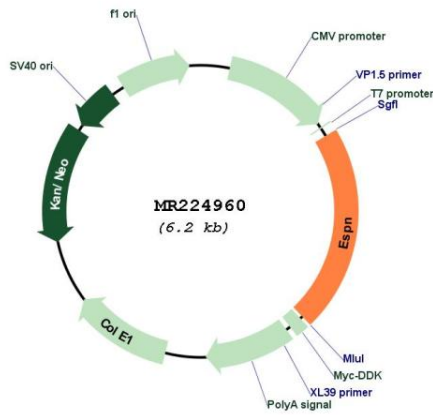
UniProt ID: [Q9ET47](#)

Cytogenetics: 4 82.9 cM

**MW:** 48 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 MR224960