

Product datasheet for **MG224952**

Espn (NM_207688) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Espn (NM_207688) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Espn
Synonyms:	je
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG224952 representing NM_207688
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGCAATAGCTTGAACACCGAGTCTTGTCCCGGGATCAATCCATGGACCTGGAGGCAAAAGCAGCTGG
 ACTCGGGTATGTCTCGCCAACACCACCATGTGGTCCAGCCAATGACCTTTGACCTGGGCTCGCCTAC
 TAGCACGTTTCCAACATGACTCCTGCTCCTCCAGTCACTCCAGCAGCAAGGGGACGATCGAATCGA
 GGGATTCCAGGTGCAAGAGCTGCAGACTTACAGAGCTACATGGACATGCTGAACCCAGAGAAGAGCTTGC
 CTCGGGGCAAGCTAGGGAAGCCTTCCCCGCCACCCTCCACCACCACCACCACCAAGCTTCCCCGCCACC
 CCCACCACCACAGGCACCCAGCCGCCCCACCTCCACCAGGCTACCCAGCTCCCAATCCCCCTGTGGGA
 CTGCATCTGAATAACATTTACATGCAGACCAAGAACAAGCTTCGCATGTGGAGGTGGACTCGTCAAGG
 AGCCGAGCTCGGGCGACGGCCACTCGGGCTACACAGGCAGGACTCCGGGCTGCTCAGGCAGGATTCGA
 GCTGCTGCACAGGCAGGAGCTGCTCAGGCACAGCACCGGACTGCGCAGGCAGGACTCCGACCGAAACAG
 CGCTCGTTCAGTAAACAGCCAGCACGGGGACTACTACCGCCAGCTGGGCCGACGCCCGGGGAGCCGC
 TGGCCGCACGCCCGGCATGGCCACAGCGAGGAGGCGGCGCTGCTCCCCGGGAACACGTGCACACCGG
 CTGCTCAGCGGACTCAAAGCGTCCAGGGAGTCCCGCCGCCACCGCCCGCCGCGCTGCCCGAGGCC
 CTGAGTTCGCGCCGCCGCCACCTCTGCCATCGAGGGCGCGGGCGCAGCCTGCGGGCAGCGTCTGTT
 CCTCGTCTTACTGGCAAAGTGAGAGTCTGAGACACAGGAAGAGCACCAATCTTTCAACATGATGTC
 CCCAACGGGTGATAACTCAGAGCTTCTGGCTGAGATAAAGGCGGGCAAGAGCCTGAAGCCGACCCGAG
 AGCAAGGGGCTGACAACCGTGTCTCAGGCAGTGGCAGCCAGCCTCCAGCCTGAGTACCAGCAGCTC
 TGGTGTACCTGCGCCATCTCGGACTCGGAGCCACCCCGCAGCCTCTGGGTCTCAGCAGCTGCTCAA
 TGGCAGTGTGGTCCCGGACACCCTGCCACCCCGCACCTGGAGTCCATCTGGATGTGGAGGCCCTCATT
 CCCACTCTTGATGAGCAGGGCCGCCATCCCGAGTGAAGCGCCAGGTGATGGTCCGCAAGCTGCAGC
 AGAAGATGCAGGAGGAAGAGGAGCAGCGGAGGAAGGAGGAAGAGGAGGAGGCCCGGCTCGCCAGCCTGCC
 TGCCTGGAGACGAGACATTTCTCGGAAGAAGCTGGAGGAGGAGGGAGCAGAAGCGAAAAGAGGAGGAG
 CGGCAAAGCTGGAGGAAATACAGAGGGCGAAAGAAGTGGAGAAAGCTGCGGACACTAGGCTACGACG
 AAGCCAAGCTCGGCCCTGGCAGCGACAGGTCTCTTGAAGAAGGGGAGATCCCTAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224952 representing NM_207688
 Red=Cloning site Green=Tags(s)

MGNSLEHRVLSRDQSMLEAKQLDSGMSSPNTTMSVQPMTFDLGSPTSTFSNYDSCSSSHSSSKGQRSNR
 GIPGARAADLQSYMMLNPEKSLPRGKLGKSPPPPPPPPPSPPPPPPTGTQPPPPPGYPAPNPPVG
 LHLNNIYMQTKNKL RHVEVDSLKEPSSGDHSGLHRQDSGLLRQDSELLHRQELLRHSTGLRRQDSDRKQ
 RSFSKQPSTGDYYRQLGRSPGEPLAARPGMAHSEEAALLPGNHVHNGCSADSKASRELP PPPPPPLPEA
 LSSPPPAPPLPIEGAGAACGQRRSSSTGKVRVLRHRKSTKSFNMSPTGDNSELLAEIKAGKSLKPTPQ
 SKGLTTVFSGSGQPASQPESQPLVSPAPSRTRSPTPPASGSQPLLNGSVVPAPPATPAPGVHLDVEALI
 PTLDEQGRPIPEWKQVMVRKLQKMQEEEEQRRKEEEEEARLASLPAWRRDILRKKLEEREQKRKEE
 RQKLEEIQRKEQSEKLRTLGYDEAKLAPWQRQVILKKEIPK

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_207688

ORF Size: 1599 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_207688.2](#), [NP_997571.1](#)

RefSeq Size: 1890 bp

RefSeq ORF: 1602 bp

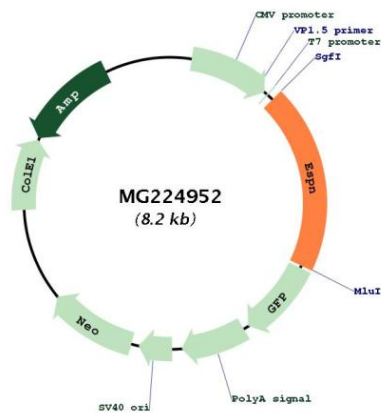
Locus ID: 56226

UniProt ID: [Q9ET47](#)

Cytogenetics: 4 82.9 cM

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 MG224952