

## Product datasheet for **MC224303**

### Astn2 (NM\_207109) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Astn2 (NM\_207109) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Astn2  
**Synonyms:** 1d8; Astnl; bM452j22.1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224303 representing NM\_207109  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCCCGCCGGCGCCGGCGCAGCCCGGGCCGCGGCTTGGGGCTTCGGGGCGGCCGAGGCTCGGCT  
 TCCACCCGGGGCCGCCGCCACCGCCCGCCGCTGCTGTTGCTGTTTCTGCTCCTGCTGCCCGCCG  
 GCCGTTGCTGGCCGGCGCCACGGCCGCCCGCCCTCGCGGAGCCCGACAGCCCATGCCGGCTCAAGACC  
 GTCACCGTATCCACGCTGCCCGCTCGCGGAAAGCGACATCGGCTGGAGCGGTGCCCGCACCGGGCCG  
 CGGCCGGGGCTGGGGCCGGGACCGAGCCGGGGCCGGAGCTGCTGCTGCTGCCCGCTCCGCCGCTCCCC  
 GGGCTCCGCGGGTTCAGCCGGCACAGCCCGGAGTCTCGTCTCCTTCTCTTTGTGCGTAATGAGCTCCCC  
 GGGCGCATCGCGGTACAAGATGACCTGGACAACACTGAGCTGCCCTTCTTACCCTGGAGATGTCTGGCA  
 CAGCAGCGGACATTTCTTTGGTTCAGTGGAGCAGCAGTGGTGGAGAATGGCACATTGTAATCCACGT  
 TTCCATGAGCAGCTCTGGCAACTGGCTCAGGCCACTGCTCCCACTCCAGGAGCCCTCGGAGATCGTT  
 GAGGAACAGATGCATATCCTCCACATTTCTGTGATGGTGGACTATTGCACTTCTCCTCCTGCTGTTGG  
 TGTTACAGTGGCACTGTATGCCAGCGCAGCTGGCAGAAGCCGGCGCATCCCACAGAAGAGCGCAAG  
 TACAGAAGCTACTCATGAGATTCATACATCCCATCAGTGTGCTGGGTCCCTCAGGCCAGGAAAGCTTC  
 CGATCCTCCAGACTTCAGACACACAACCTCAGTCATTGGTGTGCCTATCCGGGAAACCCCATCCTGGATG  
 ACTATGACTATGAAGAGGAGGAGGAACCCAGGCGAGCCAACCACGTCTCCCGTGGAGATGAGTTTGG  
 TAGCCAGATGACCCATGCCCTGGACAGCTTGGGAAGGCCAGGAGAAGAGAAAGTGGAAATTTGAGAAGAAA  
 GCAGCAGCTGAGGCGACACAGGAAACAGTGGAGTCCCTGATGCAGAAGTTCAAGGAGAGTTTCCGTGCTA  
 ACACACCAGTGGAGATCGGTGAGTTCAGCCAGCCTCGCGCAGCAGCACCTCTGCAGGGAAGAGGAAGCG  
 GAGGAACAAATCTCGAGGGGAATCAGCTTTGGGAGAACCAAGGGGACATCAGGCTCAGAAGCAGATGAC  
 GAAACACAGCTGACCTTCTACACAGAGCAGTACCGCAGTCCGCCCGCAGCAAAGTTTACTGAAAAGCC  
 CTGTGAATAAGACAGCCTTAACACTGATTGCTGTGAGCTCCTGCATCTTGCCATGGTGTGTGGCAACCA  
 GATGTCCTGTCCACTTACTGTGAAGGTGACTTTGCATGTGCCTGAACACTTCATTGCAGATGGGAGCAGC  
 TTTGTGTTGAGTGAAGGAAGCTACCTGGATATCTCCGATTGGCTAAACCTGCCAAGCTGTCTGTATT



[View online »](#)

ACCAGATCAATGCCACCTCGCCATGGGTGAGAGACCTCTGTGGACAGAGGACGACAGATGCCTGTGAACA  
 GCTCTGTGACCCAGATACTGGGGAGTGCAGTTGTCATGAAGGTTACGCCCTGACCCAGTCCACAGACAT  
 CTATGTGTTTCGACAGTACTGGGGTCAAAGTGAAGGACCTTGGCCTTACACAACACTGGAGAGGGGCTATG  
 ATCTGGTGACAGGAGAGCAAGCCCTGAAAAGATTCTCAGGTCTACTTTCAGCTTGGGCCAAGGCCCTCTG  
 GCTTCCGGTCAGCAAAAGCTTTGTGGTCCACCCGGTGGAGCTGTCCATCAACCCCTGGCCAGCTGCAAG  
 ACGGATGTGCTCGTCACAGAAGACCTGCGGATGTCAGGGAAGAAGCAATGTTGTCCACGTACTTTGAAA  
 CCATCAACGACCTGTCTCCTCTTGGTCCAGTCCGTGACTGCTCAAGGAACAACGGGGCTGTACCCG  
 TAACTTCAAGTGTGTCTGACCCGAGGTGGACTCCTCGGGATGTGTGTCTGAGGAACCTGAAGCCC  
 ATGAAGGATGGCTCTGGCTGCTATGATCACTCCAAGGGCATCGACTGCTCTGATGGCTTTAATGGAGGGT  
 GTGAGCAGCTTTGCCTACAACAACACTGCCTTTGCCCTATGATACCACCTCCAGCACCATCTTCATGTT  
 CTGCGGCTGTGTGAAGAGTACAAGCTGGCTCCTGATGGGAAATCCTGTCTAATGCTCTCAGATGTCTGT  
 GAGGGCCCAAGTGCCTCAAACCTGACTCAAATTCATGACACCCTCTTGGAGAGATGCTACATGGTT  
 ACAACAACCGGACACAACATGTAACCAAGGCCAAGTCTCCAATGACATTGAGGGAGAATAAATTCAT  
 CAAGGACTTTCCACAGCTGGCAGATGGGCTGTTGGTGATCCCGCTGCCAGTGAAGAGCAATGCCGGGG  
 GTTCTCTGAGCCCTCCAGACCTTCCAGCTTCTCACAGGAGACATCAGGTATGATGAGGCCATGGGGT  
 ACCCCATGGTGAACAGTGGCGTGTCCGGAGCAATCTCTATCGTGTGAAGCTGAGTACTATCACCCCTCTC  
 AGCAGGCTTACCAATGTCTAAAGATCCTGACAAAGAGAGCAGTCCGGATGAGCTGCTGTCTTCATC  
 CAGCACTATGGCTCCCACTACATTGCCGAGGCTTTATACGGTTCTGAGCTCACCTGCATCATCCATTTTC  
 CCAGCAAGAAGTCCAGCAGCAGCTATGGCTCCAATATCAGAAAGAGACCACGGAGCTGGGCAGCAAGAA  
 GGAGCTCAAGTCCATGCCCTTATCACCTACCTCTCCGGTCTCCTGACAGCCAGATGCTATCAGATGAC  
 CAGCTCATCTCAGGTGTGGAGATTCGATGTGAGGAGAAGGGCCGCTGTCCATCTACCTGTACCTTTGCC  
 GCCGGCAGGCAAGAGCAGCTGAGCCCCACACCAGTGTCTGCTGGAGATAAACCGTGTGGTTCCACTTTA  
 TACCCTCATCAAGACAATGGCACAAGGAGGCCCTTCAAGAATGCATGATGAGTCTTACTGGTGTCT  
 GGTAAAGGAGATGTGATTGATGACTGGTGCAGGTGTGACCTCAGTGCCTTTGATGCCAGTGGGCTTCCAA  
 ATTGTAGCCCTTCCACAGCCGGTGTACGACTTTCTCCAACAGTGGAGCCTTCCAGCACTGTGGTTTC  
 CCTGGAGTGGGTAGATGTTGAGCCAGCCATTGGAACCAAGTCTCTGACTATATTCTGCAGCACAAGAAA  
 GTGGATGAATACACAGACACGGACCTATACACAGGAGAATTCCTGAGTTTTGCCGATGACTTACTTTCTG  
 GCCTGGGTACATCTTGTGTAGCAGCTGGTGAAGCCATGGAGAGGTTCTGAAGTCAATCTACTCGGT  
 GATCTTCAAGTGCCTGGAGCCAGATGGTCTTTACAAGTCACTCTGTATGCTGTGGATACTCGAGGGAGG  
 CACTCAGAGCTCAGCACAGTACTTAAGGACAGCTTGTCCACTGGTAGATGACAACAAAGCAGAAGAGA  
 TAGCGGACAAGATTTACAATCTATAACAATGGTTACACAAGTGGCAAGGAGCAGCAGACTGTTACAACAC  
 ACTGATGGAAGTCTCCGCTCCATGCTCTTCCGTGTCCAGCACCCTACAACCTCACTATGAAAAGTTT  
 GGTGACTTCGTCTGGAGGAGTGAAGGATGAGCTAGGACCAAGGAAGGCTCATCTGATTCTGCGCGGCTGG  
 AGCGGGTCCAGCAGCCACTGTTCTAGTCTTTGAGAAGCGCCTACATCCAGAGTCTGTGGACACCATAACC  
 CTATCTCTTCCGCGAGTGAAGGAGTCCGGCTGCGAGGAATGGTGTGGTACAGCATCTCAAAGACACC  
 AAAATCACATGTGAGGAGAAGATGGTGTCTATGGCCCAACACGTACGGGGAACCAAGGCCGGTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:**

SgfI-MluI

**ACCN:**

NM\_207109

**Insert Size:**

4059 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_207109.2](#), [NP\\_996992.1](#)

**RefSeq Size:** 4831 bp

**RefSeq ORF:** 4059 bp

**Locus ID:** 56079

**UniProt ID:** [Q80Z10](#)

**Cytogenetics:** 4 C1

**Gene Summary:** Mediates recycling of the neuronal cell adhesion molecule ASTN1 to the anterior pole of the cell membrane in migrating neurons. Promotes ASTN1 internalization and intracellular transport of endocytosed ASTN1 (PubMed:20573900). Selectively binds inositol-4,5-bisphosphate, inositol-3,4,5-trisphosphate and inositol-1,3,4,5-tetrakisphosphate, suggesting it is recruited to membranes that contain lipids with a phosphoinositide headgroup (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) represents the longer transcript and it encodes the longer isoform (b). Isoform b is most similar to the protein encoded by transcript variant 3 of the human gene. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.