

## Product datasheet for RC224212

### ASTN2 (NM\_014010) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ASTN2 (NM_014010) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ASTN2
Synonyms:	bA67K19.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224212 representing NM_014010 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGCCCGCCGGCCCGGCTCAGCCCCGGCCCCGGCTCGGGGCTCCGGGGCCGGCCGAGGCTCTGCT  
TCCACCCGGGGCCCGCCACTGCTGCCGCTGCTGCTGTTTCTGCTCCTGCTGCCGCCCGCCGCT  
GCTGGCCGGCCACCGCCGCTGCCTCGCGGGAGCCGACAGCCCGTCCGGGCTGAAGACCGTACGGTG  
TCCACTGCCCCCCTCGGGAGAGCGACATCGGCTGGAGCGGCCCGCCGGGGCCGGGGTGGGA  
CCGGGGCCGGAGCCCGCCCGCCCGCTCCCGGGCTCTCCTGGCTCTGCCGGCACCGCCCGGAGTC  
GCGCTCCTGCTCTTTGTGCGTAACGAGCTGCCGGGGCGCATCGCGGTGACAGGACGACCTGGACAACACC  
GAGCTGCCCTTTCACCTGGAGATGTCTGGCACAGCGCGGACATCTCGCTGGTGCATGGAGACAGC  
AGTGGCTGGAGAAATGGCACCTTGTACTTCCACGCTCCTATGAGCAGCTCCGGGACGCTGGCCCAAGCCAC  
CGCCCCACTCTCCAGGAGCCCTCGGAGATTGTTGAGGAGCAGATGCACATCCTCCACATTTCTGTGATG  
GGTGGCTCATCGCGTCTGCTGCTGCTGCTGGTGTACCGTGGCGTGTACGCCAGCGACGTTGGC  
AGAAGCGTCGCCGCATCCCCAGAAGAGCGCAAGCACAGAAGCCACTCATGAGATCCACTACATCCCATC  
TGTGCTGCTGGTCCCCAGGCGCGGGAGAGCTTCCGTTTATCCCGGCTGCAAACCCACAATCCGTCATT  
GGCGTCCCATCCGGGAGACTCCATCCTGGATGACTATGACTGTGAGGAGGATGAGGAGCCACCTAGGC  
GGGCAACCATGTCTCCCGGAGGACGAGTTTGGCAGCCAGGTGACCCACTCTGGACAGTCTGGGACA  
TCCAGGGGAAGAGAAGGTGGACTTTGAGAAGAAAGGAGGAATCAGCTTTGGGAGAGCCAAGGGGACGTCG  
GGCTCAGAGGCAGACGATGAACTCAGCTGACATTCTACACGGAGCAGTACCGCAGTCCGCCCGCAGCA  
AAGTTTCTGAAAAGCCAGTGAACAAGACAGCCCTGACACTGATTGCTGTGAGTTCCTGCATCCTGGC  
CATGGTGTGGCAGCCAGATGTCTTGTCCACTACTGTGAAGGTGACTCTGCATGTGCCCGAGCACTTC  
ATAGCAGATGGAAGCAGCTTCGTGGTGAAGGAGGACTACCTGGACATCTCCGACTGGTTAAACCCGG  
CCAAGCTTCCCTGTATTACCAGATCAATGCCACCTCCCATGGGTGAGGGACCTCTGTGGACAAAGGAC  
GACAGATGCTGTGAGCAGCTCTGCGACCCAGAAACCGGAGAGTGCAGCTGTCATGAAGGCTATGCCCT



GACCCTGTTCACAGACACCTGTGTGTGCCAGTGACTGGGGACAGAGTGAAGGACCTTGGCCCTACACGA  
CACTTGAGAGGGGCTATGATCTGGTGACAGGGGAGCAAGCCCCTGAAAAGATTCTCAGGTCTACTTTCAG  
CTTGGGCCAAGGCCTCTGGCTTCTGTCTCAGCAAAAGCTTTGTGGTTCCGCCTGTGGAGCTGTCCATCAAC  
CCCCTGGCCAGCTGCAAGACCGATGTGCTCGTCACGGAAGACCCTGCAGATGTCAGGGAAGAAGCGATGC  
TGTCCACATACTTTGAAACCATCAATGACCTGCTGTCTTCTTCGGGCCAGTTCGTGACTGCTCTCGGAA  
CAATGGGGGTGCACTCGCAACTTCAAGTGTGTCTGACCGGCAGGTGGATTCCCTCGGGATGTGTGTG  
CTTGAGGAGCTGAAACCCATGAAGGATGGCTCTGGCTGCTACGACCACTCAAAGGCATTGACTGCTCTG  
ATGGCTTTAATGGCGGCTGTGAGCAGCTGTGCCTGCAGCAGACGCTGCCCTGCCCTACGATGCCACTTC  
GAGCACCATCTTCATGTTCTGCGGTTGCGTGGAGGAGTACAAACTGGCTCCTGATGGAAAATCCTGCTTA  
ATGCTCTCAGATGTCTGCGAGGGCCCAAGTGCCTCAAACCTGACTCAAATTCATGATACCCCTTTTG  
GAGAGATGCTACATGGTTACAACAACCGGACCCAGCATGTGAACCAAGGCCAAGTCTTCAGATGACCTT  
TAGGGAGAACAACCTTCATCAAGGACTTTCCCGAGCTGGCCGATGGGCTGTTGGTATCCCCTGCCGGT  
GAGGAGCAGTGCCGGGGGTCTCTCCGAGCCCCTTCAGACCTCAAACCTGCTCACTGGAGATACAGGT  
ATGATGAGGCCATGGGTTACCCCATGGTGCAGCAGTGGCGGTCCGGAGCAACCTCTACCGTGTGAAGT  
CAGCACCATCACCTCGCAGCAGGCTTACTAATGTTCTCAAGATCCTGACCAAGGAGAGCAGTCCGGAG  
GAGCTGCTGTCTTCATCCAGCACTATGGCTCCCACTACATCGCAGAGGCCCTCTATGGCTCAGAGCTCA  
CCTGCATCATCCACTTTCCAGCAAGAAGTCCAGCAGCAGCTGTGGCTCCAGTATCAGAAAAGAGACCAC  
AGAGCTGGGCAGCAAGAAGGAGCTCAAGTCCATGCCCTTCATCACCTACCTCTCAGGTTTGTGACAGCC  
CAGATGCTGTGAGATGACCAGCTCATTTAGGTGTGGAGATTCGTGTGAGGAGAAGGGGCGCTGTCCAT  
CTACCTGTACCTTTGCCGCCGGCCAGGCAAGGAGCAGCTGAGCCCCACACCAAGTGTCTGAAATCAA  
CCGTGTGGTGCCACTTTATACCTCATCCAAGACAATGGCACAAGGAGGCCCTCAAGAGTGCAGTGTG  
AGTTCTACTGGTGTGTCAGGGAAGGGGATGTGATCGATGACTGGTGCAGGTGTGACCTCAGCGCCTTTG  
ATGCCAATGGGCTCCCAACTGCAGCCCCTTCTGCAGCCGGTGTGCGGCTGTCCCAACAGTGGAGCC  
CTCCAGTACTGTGGTCTCCTTGGAGTGGTGGATGTTTCAGCCAGCTATTGGGACCAAGGTCTCCGACTAT  
ATTCTGCAGCATAAGAAAGTGGATGAATACACAGACACTGACCTGTACACAGGAGAATTCCTGAGTTTTG  
CTGATGACTTACTCTCTGGCCTGGGCACATCTTGTGTAGCAGCTGGTCTGAAGCCATGGAGAGGTCCTGA  
AGTCAGTATCTACTCAGTCATCTTCAAGTGTCTGGAGCCGACGGTCTCTACAAGTTCACCTGTATGCT  
GTGGATACACGAGGGAGGCACTCAGAGCTAAGCACGGTGACCCTGAGGACGGCCTGTCCACTGGTAGATG  
ACAACAAGGCAGAAGAAATAGCTGACAAGATCTACAATCTGTACAATGGGTACACAAGTGGAAAGGAGCA  
GCAGATGGCCTACAACACACTGATGGAGGTCTCAGCCTCGATGCTGTTCCGAGTCCAGCACCCTACAAC  
TCTCACTATGAAAAGTTTGGCGACTTCGTCTGGAGAAGTGAAGTGAAGTGGGGCCAGGAAGGCCACC  
TGATTCTACGGCGACTGGAGAGGGTGAAGTACCCACTGCTCCAGCCTCCTGCGGAGTGCCTACATCCAGAG  
CCGCGTGGAAACAGTGCCCTATCTTTTCTGCCGACGAGGAGGTCCGGCCTGCAGGCATGGTGTGGTAT  
AGCATCTCAAGGACACCAAAATCACGTGTGAGGAGAAGATGGTGTCAATGGCCGAAACACGTACGGGG  
AGTCCAAGGGCCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC224212 representing NM\_014010  
 Red=Cloning site Green=Tags(s)

```

  MAAAGARLSPGPGSGLRGRPRLCFHPGPPPLPLLLLFLLLLPPPPLLAGATAAASREPDSPCRLKTVTV
  STLPAIRESDIGWSGARAGAGAGTGAGAAAAASPGSPGSAGTAAESRLLL FVRNELPGRIAVQDDLNT
  ELPPFTLEMSGTAADISLVHWRQQWLENGTLYFHVSMSSSGQLAQATAPTLQEPSEIVEEQMHILHSVM
  GGLIALLLLLL VFTVALYAQRRWQKRRRIPQKSASTEATHEIHYIPSVLLGPQARESFSSRLQTHNSVI
  GVPIRETPILDDYDCEEDEEPPRRANHVSREDEFSGSVTHTLDSLGHPEEKVDFEKKGGISFGRKGT
  GSEADDETQLTFYTEQYRSRRRSKGLLKSVPVNTALTLIAVSSCILAMVCGSQMSCPLTVKVTLVHPEHF
  IADGSSFVYSEGSYLDISDWLNPAKLSL YYQINATSPWVRDL CGQRTDACEQLCDPETGECSCHEGYAP
  DPVHRHL CVRSDWQSEGPWYTT LERGYDLVTGEQAPEKILRSTFSLGQGLWLPVSKSFVPPVELSIN
  PLASCKTDVLTEDPADVREEAMLSTYFETINDLLSSFGPVRDCSRNNGGCTRNFKCVSDRQVDSGCV
  PEELKPMKDGSGCYDHSKIGDCSDGFNGGCEQLCLQQTLPYPDATSSTIFMFCGCVEEYKLAPDGKSL
  MLSDVCEGPKCLKPDSKFNDFLFGEMLHGYNRTQHVNQGVFQMTFRENFIKDFPQLADGLLVIPLV
  EEQCRGVLSEPLPDLQLLTGDIRYDEAMGYPMVQQRVRSNL YRVKLSITLAAGFTNVLKITLKESRE
  ELLSFIQHYGSHYIAEALYGSELTCIIHFPSKKVQQQLWLQYQKTELGSKKELKSMPFITYLSGLLTA
  QMLSDQLISGVEIRCEEKGRCPSTCHLCRRPGKEQLSPTPVLL E INRVVPLYTLIQDNGTKEAFKSALM
  SSWYCSGKGDVIDDWCRCDLSAFDANGLPNCSPLLQPVLRLSPTVEPSSTVVSLEWVDVQPAIGTKVSDY
  ILQHKKVD EYTDLDL YTGELFSFADLLSGLGTSCVAAGRSHGEVPEVSIYSVIFKCLEPDLGKFTLYA
  VDTRGRHSELSTVTLRTACPLVDDNKAEEIADKIYNLYNGYTSKGEEQOMAYNTLMEVSASMLFRVQHYN
  SHYEKGFDFVWRSEDELGPRKAHLILRRLERVSSHCSLLRSAYIQSRVETVPYLCRSEEV RPAGMVVY
  SILKDTKITCEEKVMVSMARNTYGESKGR
  
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



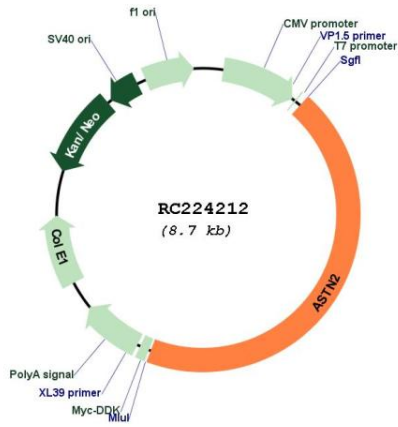
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_014010

**ORF Size:** 3864 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_014010.4</a> , <a href="#">NP_054729.3</a>
<b>RefSeq Size:</b>	4604 bp
<b>RefSeq ORF:</b>	3867 bp
<b>Locus ID:</b>	23245
<b>UniProt ID:</b>	<a href="#">O75129</a>
<b>Cytogenetics:</b>	9q33.1
<b>Domains:</b>	MACPF, FN3
<b>Protein Families:</b>	Transmembrane
<b>MW:</b>	142.5 kDa
<b>Gene Summary:</b>	This gene encodes a protein that is expressed in the brain and may function in neuronal migration, based on functional studies of the related astrotactin 1 gene in human and mouse. A deletion at this locus has been associated with schizophrenia. Multiple transcript variants encoding different proteins have been found for this locus. [provided by RefSeq, May 2010]

Product images:



Circular map for RC224212