

## Product datasheet for **MR221087**

### Asic2 (NM\_001034013) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Asic2 (NM_001034013) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Asic2
Synonyms:	Accn1; ACIC2; BNaC1; BNaC1a; BNC1; Mdeg
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR221087 representing NM\_001034013  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGACCTCAAGGAGAGCCCCAGCGAGGGCAGCCTGCAACCTTCCAGCATCCAGATCTTCGCCAACACCT  
 CTA CTCTCCATGGCATCCGCCACATCTTCGTGTATGGGCCGCTGACCATCCGGCGTGTGCTTTGGGCAGT  
 GGCTTCGTGGGATCTCTGGGCCTGCTGCTGGTGGAGAGCTCGGAGAGAGTATCCTACTATTTCTCATAT  
 CAGCATGTTACCAAGGTGGATGAAGTGGTGGCCAGAGCCTGGTCTTCCAGCTGTGACCTCTGCAACC  
 TCAATGGCTTCCGGTTCTCCAGGCTTACCACCAACGACTTGACCACGCTGGGGAGTTGTGGCCCTGTT  
 GGATGTCAACTTGCAGATTCTGACCCGCATCTGGCGGACCCACCGTGTGGAGGCCCTCCGACAGAAG  
 GCCAATTCAAACACTACAAACCGAAGCAGTTCAGCATGCTGGAGTTCCTGCACCGGGTAGGCCATGACC  
 TGAAGGATATGATGCTCTACTGCAAGTTCAAGGGGCAGGAGTGTGGGCATCAAGACTTCACCACAGTGT  
 TACAAAATATGGGAAGTGTACATGTTAACTCAGGCGAGGATGGCAAGCCTCTGCTCACCACGGTCAAG  
 GGGGGGACGGGCAACGGGCTGGAGATCATGCTGGACATTCAGCAAGATGAGTACCTGCCATCTGGGGAG  
 AGACAGAGGAAACAACGTTTGAAGCAGGAGTGAAGGTTTCAGATCCACAGCCAGTCTGAGCCACCTTTCAT  
 CCAAGAGCTGGGCTTTGGGGTGGCTCCGGGGTTCAGACCTTCGTGGCCACACAAGAGCAGAGGCTCACA  
 TATCTGCCCCCGCGTGGGGGAGTGCCGGTCTCAGAGATGGGACTCGACTTCTTTCTGTTTACAGCA  
 TCACAGCTGTGGATCGACTGTGAGACCCGCTACATCGTGGAGAAGTGAAGTCCGCATGGTCCACAT  
 GCCAGGGGATGCCCTTTCTGCACCCCTGAGCAGCACAAGGAGTGTGCAGAGCCAGCCCTCGGCTTACTG  
 GCAGAAAAGGACAGCAATTACTGTCTCTGCAGGACACCCTGCAACCTGACCCGCTACAACAAGAGCTCT  
 CCATGGTAAAGATCCCCAGCAAGACGTCAGCCAAAGTACCTGGAGAAGAAATTTAACAAATCGGAAATA  
 TATCTCCGAGAACAATTCTTGTCTGGATATATTTTTGAGGCGCTCAATTACGAGACAATTGAACAGAAG  
 AAGGCGTATGAAGTTGCTGCCTTACTTGGTGCATTGGTGGTCAAATGGGATTGTTATTGGTGTAGTA  
 TCCTTACAATACTAGAGCTCTTTGATTACATTTACGAGCTGATCAAAGAGAAGCTATTAGACCTGTTGG  
 CAAAGAAGAAGAGGAAGGGAGCCATGATGAGAACATGAGCACCTGCGACACAATGCCAAACCACTCCGAA  
 ACCATCAGCCACACTGTGAACGTGCCCTGCAGACAGCTTTGGGCACCCTGGAGGAGATTGCCTGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR221087 representing NM\_001034013  
 Red=Cloning site Green=Tags(s)

MDLKESPESGLQPSSIQIFANTSTLHGIRHIFVYGPLTIRRVLWAVAFVGSGLLLLVESSERSVYFYSY  
 QHVTKVDEVVAQSLVFPVAVTLCNLNGFRFSRLTTNDLYHAGELLALLDVNLQIPDPHLADPTVLEALRQK  
 ANFKHYKPKQFSMLEFLHRVGHDLKDMMLYCKFKGQECGHQDFTTVFVKYKCYMFNSGEDGKPLLTVK  
 GGTGNGLIIMLDIQQDEYLPWGETEETTFEAGVKVQIHSQSEPPFIQELGFGVAPGFQTFVATQEQLT  
 YLPPPWGECRSSEMGLDFFPVYSITACRIDCETRYIVENCNRMVHMPGDAPFCTPEQHKEAEPALGLL  
 AEKDSNYCLCRTPCNLTRYNKELSMVKIPSKTSAKYLEKKFNKSEKYISENILVLDIFFEALNYETIEQK  
 KAYEVAALLGDIGGQMLFIGASILTILELFDYIYELIKEKLLDLLGKEEEEESHENMSTCDTTPNHSE  
 TISHTVNVPLQ TALGTLEEIAC

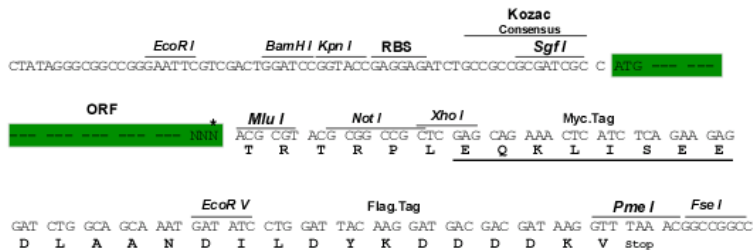
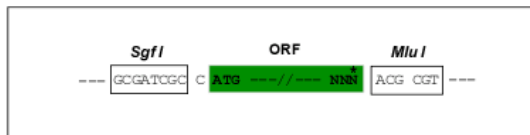
**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

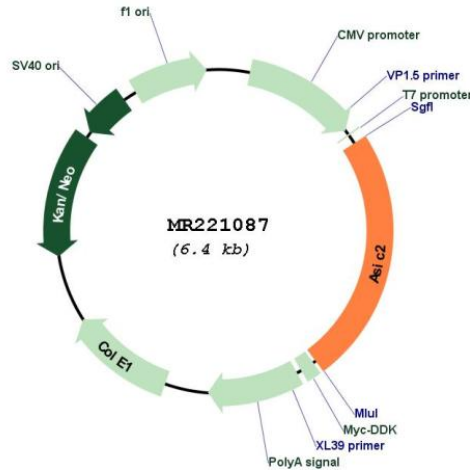
## Cloning Scheme:

Cloning sites used for ORF Shuttling:



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

## Plasmid Map:



ACCN: NM\_001034013

ORF Size: 1536 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\\_001034013.2](#), [NP\\_001029185.1](#)

**RefSeq Size:** 2643 bp

**RefSeq ORF:** 1539 bp

**Locus ID:** 11418

**UniProt ID:** [Q925H0](#)

**Cytogenetics:** 11 48.43 cM

**MW:** 58.2 kDa

**Gene Summary:** Cation channel with high affinity for sodium, which is gated by extracellular protons and inhibited by the diuretic amiloride. Also permeable for Li(+) and K(+). Generates a biphasic current with a fast inactivating and a slow sustained phase. Heteromeric channel assembly seems to modulate.[UniProtKB/Swiss-Prot Function]