

Product datasheet for **MC228306**

Asic1 (NM_001289791) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Asic1 (NM_001289791) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Asic1
Synonyms:	Accn2; AI843610; ASIC; ASIC1a; B530003N02Rik; BNaC2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC228306 representing NM_001289791
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCATCCAGATCTTTTGTCTGTGTCATTCTCTCTGGAGAGGAGGCCCCAGGATCCATGGGAGATA
 TCTGGGTCCCCACCACCACCACCGGCAGCAGCAGGACAGCTCAGAATCGGAAGAAGAAGAGAAGGA
 AAAGGAGTCAGGGATGGAGCTGGATGAGGGTACTCACCTAGGGACTTGGTGGCCTTTGCCAACAGTTGT
 ACCCTCCACGGTGCCAGCCATGTCTTTGTGGAAGGGGGCCAGGGCCACGGCAGGCCCTATGGCGGTGG
 CCTTTGTCATAGCACTGGTGCCTTCTGTGCCAGGTAGGGGACCGAGTTGCTTATTACCTCAGCTACCC
 GCACGTGACTTTGCTAGATGAAGTGCCACCACAGAGCTGGTCTTCCAGCTGTCACCTTCTGTAACACC
 AATGCCGTGCGGTTGCCAGCTCAGCTACCCTGACTTGTCTACCTGGCCCCATGCTCGGTTGGATG
 AGAGTGACGATCCTGGGTGCCCTTGTCCACCTGGGCCAGAGGCTTTCTCGGGCAGCCCTTAACTCT
 CCATCGTTTCTACAACCGCTCTTCCACCGCTGGAGGACATGCTGCTCTATTGCTCTACTGTGGGGC
 CCCTGTGGTCCCCACAACCTTCTCAGTGGTCTTACGCGGTATGGGAAGTGTACACATTAACCTCGGCC
 AAGATGGCGGCCACGGCTGAAGACCATGAAAGGTGGGACTGGCAACGGCCTGGAGATCATGCTGGACAT
 TCAGCAAGATGAATACTTGCCTGTGTGGGGAGAGACTGATGAGACATCGTTCAAGCAGGCATCAAAGTG
 CAGATCCACAGTCAGGACGAGCCTCCTTTCATCGACCAGCTGGGCTTTGGCGTGGCCCCAGGCTTCCAGA
 CGTTTGTGTCTTCCAGGAGCAGAGGCTCATCTACCTGCCCTCCCCCTGGGGCACCTGCAATGCTGTTAC
 CATGGACTCGGATTTCTCGACTCCTACAGCATCACGGCTGCCGATTGATTGTGAAACCGTTACCTG
 GTGGAAAACGCAACTGCCGATGGTGCACATGCCAGGGGATGCCCATACTGTACTCCGGAGCAGTACA
 AGGAGTGTGCAGACCCTGCCCTGGACTTCTAGTGGAGAAAGACCAGGAATACTGTGTGAGATGCC
 CTGCAACCTGACCCGCTACGGCAAGGAGCTGTCCATGGTCAAGATCCCCAGCAAAGCCTCAGCCAAGTAC
 CTGGCCAAGAAGTTCAACAAATCTGAACAGTACATAGGGGAGAATATTCTGGTGTGGACATTTTCTTTG
 AAGTCTCAACTATGAGACCATCGAGCAGAAGAAGGCCTATGAGATCGCAGGGCTTTTGGGTGACATCGG
 GGGCCAGATGGGATTGTTTCATCGGGCCAGCATCCTCACAGTGTGGAACCTTTGACTATGCCTATGAG
 GTCATTAAGCACCAGGCTGTGTAGACGTGGGAAGTCCAGAAAGGAGGCTAAGAGGAACAGCGCAGATAAGG
 GCGTGGCGCTCAGCCTGGATGACGTCAAAGACACAATCCCTGCGAGAGCCTCCGAGGACATCCTGCCGG
 GATGACGTACGCTGCCAACATCTACCTACCATCCCCTCGAGGCACGTTTGGGACTTACCTGCT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_001289791
- Insert Size:** 1680 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).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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_001289791.1](#), [NP_001276720.1](#)

RefSeq Size: 4288 bp

RefSeq ORF: 1680 bp

Locus ID: 11419

UniProt ID: [Q6NXX8](#)

Cytogenetics: 15 F1

Gene Summary: Proton-gated sodium channel; it is activated by a drop of the extracellular pH and then becomes rapidly desensitized. Generates a biphasic current with a fast inactivating and a slow sustained phase. Has high selectivity for sodium ions and can also transport lithium ions with high efficiency. Can also transport potassium ions, but with lower efficiency. It is nearly impermeable to the larger rubidium and cesium ions. Mediates glutamate-independent Ca(2+) entry into neurons upon acidosis. This Ca(2+) overloading is toxic for cortical neurons and may be in part responsible for ischemic brain injury. Heteromeric channel assembly seems to modulate channel properties. Functions as a postsynaptic proton receptor that influences intracellular Ca(2+) concentration and calmodulin-dependent protein kinase II phosphorylation and thereby the density of dendritic spines. Modulates activity in the circuits underlying innate fear.[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR and represents use of an alternate promoter, compared to variant 1. It encodes isoform 2 which has a distinct N-terminus compared to isoform 1. 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.