

Product datasheet for **MC205227**

Asic1 (NM_009597) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Asic1 (NM_009597) Mouse Untagged Clone
Tag: Tag Free
Symbol: Asic1
Synonyms: Accn2; AI843610; ASIC; ASIC1a; B530003N02Rik; BNaC2
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >BC067025

```

CCGAGCTGAGCCGAGCTGGCCGAGCGGGCCGCTCCCTGCAGGGCTCTACGCGGGTGCCGCGGCAGCCGGC
GGCTCGGGCTCCGGCCATGAGCCCTCCGCCGCGCGGCTGAGCCACGGACCGCTCGCGCCCAGG
ACCTGCAGCGGGCGCGGCTTTCCCCAGCCCCCTCAGGATCCCTTGGCAAGCATGGAACCTGAAGACCGA
GGAGGAGGAGGTGGTGGTGTCCAGCCGTGAGCATCCAGGCTTTTGCCAGCAGCTCCACGCTGCACGGT
CTTGCCACATCTTCTCCTATGAGCGGCTGTCTCTGAAGCGGGCACTGTGGGCCCTGTGTTTCTGGGTT
CGCTGGCCGCTCCTGCTGTGTGTGTGCACTGAGCGTGTGCACTACTTCTGCTACCACCACGTACACAA
GCTCGACGAGGTGGCTGCCTCCAGCTCACCTTCCCTGCCGTCACCTCTGCAACCTCAATGAGTTTCGC
TTTAGCCAAGTCTCCAAGAATGACCTGTACCATGCTGGGAACTGCTGGCCCTGCTCAACAACAGGTATG
AGATACCGGACACACAGATGGCTGATGAAAAGCAGCTGGAGATATTGCAGGACAAGGCCAATCCGTAG
CTTCAAGCCCAAGCCCTTCAACATGCGTGAGTTCTACGACAGAGCAGGGCATGACATTCGAGACATGCTT
CTCTCGTGCCACTTCCGAGGGGAGGCCTGCAGCGCTGAAGACTTCAAAGTGGTCTTCACGCGGTATGGGA
AGTGCTACACATTCAACTCGGGCAAGATGGGCGGCCACGGCTGAAGACCATGAAAGGTGGGACTGGCAA
CGGCTGGAGATCATGCTGGACATTCAGCAAGATGAATACTTGCCTGTGTGGGAGAGACTGATGAGACA
TCGTTTGAAGCAGGCATCAAAGTGCAGATCCACAGTCAGGACGAGCCTCCTTTCATCGACCAGCTGGGCT
TTGGCGTGGCCCCAGGCTTCCAGACGTTTGTGTCTTGCCAGGAGCAGAGGCTCATCTACCTGCCCTCCCC
CTGGGGCACCTGCAATGCTGTTACCATGGACTCGGATTTCTTCGACTCCTACAGCATCACGGCCTGCCGG
ATTGATTGTGAAACCCGTTACCTGGTGGAAAACGCAACTGCCGTATGGTGCACATGCCAGGGGATGCC
CATACTGTACTCCGGAGCAGTACAAGGAGTGTGCAGACCCTGCCCTGGACTTCCCTAGTGGAGAAAGACCA
GGAATACTGTGTGTGAGATGCCCTGCAACCTGACCCGCTACGGCAAGGAGCTGTCCATGGTCAAGATC
CCCAGCAAAGCCTCAGCCAAGTACCTGGCCAAGAAGTTCAACAAATCTGAACAGTACATAGGGGAGAATA
TTCTGGTGTGGACATTTTCTTTGAAGTCTCAACTATGAGACCATCGAGCAGAAGAAGGCTATGAGAT
CGCAGGGCTTTTGGGTGACATCGGGGGCCAGATGGGATTGTTTCATCGGGGCCAGCATCCTCACAGTGCTG
GAACTCTTTGACTATGCCTATGAGGTCAATTAAGCACCGGCTGTGTAGACGTGGGAAGTCCAGAAGGAGG
CTAAGAGGAACAGCGCAGATAAGGGCGTGGCGCTCAGCCTGGATGACGTCAAAGACACAATCCCTGCGA
GAGCCTCCGAGGACATCCTGCCGGATGACGTACGCTGCCAACATCCTACCTCACCATCCGCTCGAGGC
ACGTTTGAGGACTTTACCTGCTAAGCCCTGCCAGCCGCTGTACCAAAGGCTAGGTGGGAGGGCTGGG

```



[View online »](#)

```

GGAGCAAGGGGTACCTAACTGCCCCAGCTACCCTGGGGACTTAACTGCATCCCTGGGCAGTGGTTCCC
TCTTGTCTGTGGTGAGAAAGGAGTCTTGACCAGAGTCTCTCCCAGCCTCTATCTCATCTTTTTATTTTA
ACAAAATTAATAATATAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGATCAGCCGCG
ACCTCAGGCTGCCCTCTGCTCCACGCTGCCGCCCCAGCTCCAAGCCTGAATTCTGTCTGTCTGGCTGT
ATGTCACTGAGTGTCCACCTACATTCTGCTGCCTCCAGTACCAAAGCCCCCTCCTAGTGAGGGGTGA
GGGGATCTTAGGGTCTGAAATTTGGCCCCAAACCAGAGAATGTACCTTAAGGGAGAGGGCTGGTGTGG
GGCTTCCCTAGCCTTAAGAGATGCTCTCAGCCGGGTGACTCCCCACGAGCCCAAGTCTCCAGGTAAGGAC
TCCGTGCCCAGTTACTGCTCCCTCAAGCATACGGAATCTTTACGGGGCAGAGGATTTCTGAAGAAGTAG
AGATTGGGACTCCATGTGGCCCTGGTGTGTAGGCCACATCCCAATATCTGTAAGTCACCTCCACCCCAA
AGCTGCTGGAGAGAGATCCCAAGAGGCAACCCTCTGTGACATCCCCAGAAGACCTGGCTGGTTAGCGCC
CGGCTCAGGGAGAGGGGCACGGCCGCTGACCTACTGGCTTCTCTCAGAGGCCCTTGCAGAAGGCCA
CATCCATAAAATTTCTTATGGAACAATCCCAAGTCTCTTCCCGACGTCATCCGCTTCTCTCGGCAACC
TCATCTGCATTTTCTATTTCTATATGATACAGACTCTATATTACTATAACCTTGATATACTCCCCTCCG
GCCCTGTTGTCTCCCCCTCCATCCCTCTTGTCTCCAAGAACCGCCCTCCGCCCTAGTTCTCCCTTC
TGCTCTCCCCATTCTCCTGTCTCTGAATGCCTTGCCGTATAAAGAGCTGGATTCTCCCTGGTGTCT
TGTAAGTGTACTGTGTACACACATCCCTCTGAGAAGCACAAAGGAGATGACACGCGCATTGTAACCTTCGCA
CTGTCTCGGTGGCGACATAAAGGAAGCTGTGAATTACAAGCTCTGCCTCTTTCTGGCCTCGCCCTTGGC
CCCACGACCGGGGCACCCTCTGCCTCCCCACAGCCTTAACATACCCTCTACCTTGTCCACCTATCCCA
GTGCCCTTTGCCTGGCTGACTGTGGCCTCCCTGAGGGAAGTGACTGTGGAGAGGTAGCTCCTACCCAGG
AATGGAGGACACTAAGCGGAGAGAGTTACAGACGGGAGGTGGGGAGGGAGGCTGGGGATTGGTACTCCC
TCTTGCAGCTGGGCGGTGGTACCCACAGCCAGAAGCCGAGCCCTGACTCAGTGGCCTTTCTTTCTTCG
GGGTGCCCAGGGCCAGTCCCTCACCTTGATGCCAGGCCACCGCTTGCATTTTCTGGTGTGTCAGGGCG
TGGTCACATGAGGAAAGAGATTGGCCTAGAGCAGAAGTTGAAAGACGTGCTGTTGTGTCTCCCTACCCTA
AGGGGGCCACAAGGTGAGGTAGAGGGCCTCCTCAACCAGACACCCTTCCAGGCCAGCTCTCCAATCTCA
TTCTGGCCTTCTGTGCCCCACTGTCTCTTGGTCTCTAATCCCAAAACAGGACTTATGGGCAGATCACC
TGTGTACGTTGGCCTGGAGCCAGAGAGCAAGGCTTTGGCATCTTTGAGACCTCTTGGTTCTCAAGAGTTG
TTAGAGATCAGAACTCCCCAGAAAGAAACAGGGCAAAGCTGAGAAATGTACTGGCTGGGGGGCAGC
AGGAGGGGCTCTGGGTGACGCATGCCTCTGGTCTAATAAACTGGGTTTCAACCAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
  
```

- Restriction Sites:** Ascl-NotI
- ACCN:** NM_009597
- Insert Size:** 1581 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:** [BC067025](#), [AAH67025](#)

RefSeq Size: 3800 bp

RefSeq ORF: 1581 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]