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# Product datasheet for MC224389

## Naip5 (NM_010870) Mouse Untagged Clone

### Product data:

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|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Naip5 (NM_010870) Mouse Untagged Clone |
| **Tag:** | Tag Free |
| **Symbol:** | Naip5 |
| **Synonyms:** | Birc1e; Lgn1; Naip-rs3 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**Fully Sequenced ORF:**

>MC224389 representing NM_010870
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGAGCATGGGGAGTCCTCCGAGGATCGGATTTCTGAGATTGATTATGAATTTCTCCCCGAGCTCT
CTGCTCTTCTCGGGGTGGATGCATTTCAGGTGGCAAAGAGCCAAGAAGAAGAAGAGCATAAAGAACGGAT
GAAAATGAAGAAAGGTTTTAACTCACAGATGCGCAGTGAAGCCAAACGACTAAAGACCTTTGAGACCTAT
GACACGTTCAGATCATGGACGCCACAGGAGATGGCAGCTGCTGGGTTTTACCACACAGGGGTGAGACTTG
GCGTTCAGTGCTTTTGCTGTAGCTTGATCCTCTTTGGTAACAGCCTCAGGAAGCTTCCCATAGAGAGACA
CAAGAAATTACGTCCGGAATGTGAGTTCCTTCAGGGCAAAGATGTTGGTAACATTGGCAAGTATGACATC
CGGGTGAAGAGGCCAGAGAAGATGCTGAGAGGTGGCAAAGCCAGGTACCATGAAGAGGAGGCCAGACTGG
AGTCCTTTGAGGACTGGCCATTTTATGCCCATGGGACATCACCACGTGTACTCTCAGCAGCTGGCTTTGT
CTTTACAGGTAAAAGGGACACTGTGCAGTGTTTCTCCTGTGGCGGAAGCTTGGGCAACTGGGAAGAAGGA
GATGACCCCTGGAAGGAGCATGCCAAGTGGTTCCCCAAATGTGAATTTCTTCAAAGTAAGAAATCCTCAG
AGGAAATTGCCCAGTATATTCAAAGCTACGAGGGATTTGTTCATGTAACGGGAGAACATTTTGTGAAGTC
CTGGGTCAGAAGAGAATTACCTATGGTATCAGCTTACTGCAATGACAGTGTCTTCGCTAATGAAGAACTA
AGGATGGACATGTTTAAGGACTGGCCCCAAGAATCACCTGTGGGTGTTGAAGCTCTAGTCAGAGCAGGCT
TTTTCTACACTGGCAAAAAGGACATTGTCCGGTGTTTTTCCTGTGGAGGATGTTTGGAAAAGTGGGCAGA
AGGTGACGACCCAATGGAAGATCACATCAAGTTTTTTCCCGAATGTGTATTTCTTCAAACCTTGAAGTCC
TCTGCAGAAGTAATTCCAACCCTTCAGAGCCAATATGCACTTCCAGAAGCCACGGAAACCACACGTGAAA
GCAACCATGGTGATGCAGCAGCAGTTCATTCTACAGTGGTGGACTTGGGTAGGAGTGAAGCCCAGTGGTT
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TTGCCAGAAGTGTGCTCCAGCCTTGGCACTGACCACTTGCTCAGCTGCGATGTGTCCATCATTTCAAAGC
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TGTGGAGGGGGAAACTGGCAGTGGAAAGACAACCTTCCTGAAGAGGATAGCTTTTCTCTGGGCATCAGGA

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TGCTGCCCCCTGTTGTACAGGTTCCAGCTGGTCTTCTATCTCTCCCTTAGTTCCATCACACCAGATCAGG
GACTGGCCAACATCATCTGTGCCCAACTCCTAGGGGCAGGAGGTTGCATTAGTGAAGTGTGTCTGAGCAG
CAGCATCCAGCAGTTACAACACCAGGTGCTGTTCCTGTTGGATGACTACAGTGGGCTGGCCTCACTCCCC
CAAGCCCTACACACACTGATTACAAAAAACTACTTGTCACGGACCTGCTTATTGATCGCTGTGCATACAA
ACAGGGTCAGAGACATCCGCCTATACCTAGGTACAAGTCTAGAGATCCAAGAGTTTCCCTTCTATAATAC
TGTCTCTGTATTACGGAAGTTTTTTTCACATGACATAATCTGTGTGGAAAAGCTTATAATTTACTTTATT
GATAATAAAGATTTACAGGGAGTTTACAAGACCCCTCTCTTTGTAGCAGCAGTATGTACTGACTGGATTC
AAAATGCATCTGCCCAGGATAAATTTCAAGATGTGACACTTTTCCAGTCCTACATGCAATACCTGTCCTT
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CTTTTCTCATCATGCTTTGAGTTCAATAGTGATGACCTGGCAGAGGCAGGAGTTGATGAAGATGAAAAGC
TTACCACCCTCTTGATGAGCAAATTCACCGCCCAGAGACTGAGACCAGTCTACCGGTTTTTAGGTCCTCT
GTTCCAGGAGTTTCTTGCTGCCGTGAGGTTGACTGAACTCCTGAGTTCAGATAGGCAGGAAGACCAAGAT
CTTGGACTTTATTATTTGAGACAAATCGACTCACCTCTGAAGGCAATAAACTCCTTTAACATATTTTTGT
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TGAGAAAGAGTCACTGGAGAACATGTCTGAAAATGAGGATTACATGAAGCTCCATCCACAAACTTTTCTA
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TATTGCGCCTTGCTCTAATCTTTGCTTATGAAAGCAACACAGTTGCTGAATGCTCTCCATTTATTTTGCA
ATTCCTTCGAGGAAAAACACTGGCTTTAAGAGTACTGAATTTACAGTACTTTAGGGACCACCCAGAAAGC
CTGTTACTGTTGAGGAGCTTAAAGGTTTCCATAAATGGAAATAAAATGTCATCTTATGTAGATTATTCAT
TCAAGACATATTTTGAAAACTTACAGCCACCAGCTATAGATGAGGAGTATACATCTGCCTTTGAGCATAT
AAGTGAATGGAGGAGAAATTTTGCTCAAGATGAGGAGATCATAAAAAACTATGAAAATATCCGACCCAGA
GCCCTACCAGACATCAGTGAAGGGTACTGGAAACTGTCCCCCAAGCCATGCAAGATCCCCAAGCTGGAAG
TTCAAGTGAACAACACGGATGCAGCAGATCAAGCACTGCTCCAGGTCCTCATGGAAGTCTTCTCAGCTTC
ACAGAGTATTGAGTTCCGTTTATTCAACAGCAGTGGCTTCCTTGAAAGCATCTGCCCAGCTCTGGAGCTG
AGTAAGGCCTCTGTCACCAAGTGTTCCATGTCCAGGCTGGAGCTCAGCAGAGCAGAACAGGAGCTGCTTC
TCACCCTGCCTGCCCTGCAGTCTCTCGAGGTCTCAGAGACAAACCAGTTACCAGAACAGCTCTTCCATAA
CTTGCACAAGTTCCTGGGCCTGAAAGAACTGTGTGTGAGACTAGATGGCAAACCGAATGTGCTCTCAGTC
CTTCCTAGAGAGTTCCCAAACCTCCTTCACATGGAGAAGTTATCCATCCAAACCTCCACGGAGTCTGACC
TCTCCAAACTAGTTAAATTCATCCAGAACTTTCCAAATCTCCATGTTTTCCATCTGAAATGTGATTTCCT
TTCAAATTGTGAGTCTCTCATGGCTGTGCTTGCTTCCTGCAAGAAACTCAGAGAGATTGAGTTTTCTGGA
CGATGCTTTGAAGCCATGACCTTTGTCAACATTTTGCCAAATTTTGTTTCTCTGAAGATACTGAATCTTA
AAGATCAACAATTTCCAGATAAGGAAACGTCAGAAAAGTTTGCCCAGGCTCTGGGTTCTCTCAGGAACCT
GGAGGAACTGCTCGTTCCCACTGGGGACGGGATTCACCAAGTGGCCAAACTGATTGTCCGGCAGTGTCTG
CAGCTTCCGTGCCTCCGAGTTCTCACCTTTCACGACATCTTGGACGATGACAGTGTGATTGAAATTGCCA
GGGCGGCAACCAGTGGAGGTTTCCAGAAACTTGAGAACTTAGATATTTCCATGAATCACAAGATTACCGA
GGAAGGATATAGAAATTTCTTTCAAGCCCTGGACAACTTGCCAAACCTACAAGAGCTGAACATCTGCAGG
AATATCCCAGGACGCATTCAAGTTCAGGCCACCACTGTCAAGGCTCTGGGTCAATGTGTGTCCCGACTGC
CCAGCCTCATCAGACTGCACATGCTCAGTTGGCTCCTGGATGAAGAGGACATGAAAGTGATTAATGATGT
GAAGGAAAGACATCCCCAGTCTAAACGCTTGATTATCTTCTGGAAATTGATAGTCCCATTCTCTCCTGTT
ATCCTGGAGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI

**ACCN:** NM_010870

**Insert Size:** 4212 bp

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|---|---|
| **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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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. |
| **Note:** | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| **RefSeq:** | NM_010870.2, NP_035000.2 |
| **RefSeq Size:** | 5368 bp |
| **RefSeq ORF:** | 4212 bp |
| **Locus ID:** | 17951 |
| **UniProt ID:** | Q9R016 |
| **Cytogenetics:** | 13 53.05 cM |
| **Gene Summary:** | Sensor component of the NLRC4 inflammasome that specifically recognizes and binds flagellin from pathogenic bacteria such as Legionella or Salmonella (PubMed:12526741, PubMed:21874021, PubMed:21918512, PubMed:29146805, PubMed:29182158). Association of pathogenic bacteria proteins drives in turn drive assembly and activation of the NLRC4 inflammasome, promoting caspase-1 activation, cytokine production and macrophage pyroptosis (PubMed:21874021, PubMed:21918512, PubMed:29146805, PubMed:29182158). The NLRC4 inflammasome is activated as part of the innate immune response to a range of intracellular bacteria. The NLRC4 inflammasome senses Gram-negative bacteria such as L.pneumophila and P.aeruginosa, enteric pathogens S.typhimurium (Salmonella) and S.flexneri (PubMed:21874021, PubMed:21918512, PubMed:29146805, PubMed:29182158). May contribute to prevent motor-neuron apoptosis induced by a variety of signals (By similarity).[UniProtKB/Swiss-Prot Function] |