

## Product datasheet for **SC102707**

### **KIDINS220 (AK022873) Human Untagged Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids                       |
| Product Name:             | KIDINS220 (AK022873) Human Untagged Clone |
| Tag:                      | Tag Free                                  |
| Symbol:                   | KIDINS220                                 |
| Synonyms:                 | ARMS                                      |
| Mammalian Cell Selection: | None                                      |
| Vector:                   | <u><a href="#">pCMV6-XL5</a></u>          |
| E. coli Selection:        | Ampicillin (100 ug/mL)                    |



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**Fully Sequenced ORF:** >OriGene ORF within SC102707 sequence for AK022873 edited (data generated by NextGen Sequencing)

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ATGCTGCCTCAGTATTGTACCACGATCAAAAAGGCAAACATAAATGGCCGTGTGTTAGCT
CAGTGTAACATTGATGAGCTGAAGAAAGAGATGAATATGAATTTTGGAGACTGGCACCTT
TTCAGAAGCACAGTACTAGAAATGAGAAACGCAGAAAGCCACGTGGTCCCTGAAGACCCA
CGTTTCCTCAGTGAGAGCAGCAGTGGCCAGCCCCGCACGGTGAGCCTGCTCGCCGCGCT
TCCCACAACGAGCTGCCTCACACCGAGCTCTCCAGCCAGACGCCCTACACACTCAACTTC
AGCTTCGAAGAGCTGAACACGCTTGGCCTGGATGAAGGTGCCCTCGTCACAGTAATCTA
AGTTGGCAGTCACAAACTCGCAGAACCCTCAAGTCTTTCGAGTCTCAATCCCAGGATTCC
AGTATTGAAATTTCAAAGCTTACTGATAAGGTGCAGGCCGAGTATAGAGATGCCTATAGA
GAATACATTGCTCAGATGTCCCAGTTAGAAGGGGGCCCGGGTCTACAACCATTAGTGGC
AGATCTTCTCCACATAGCACATATTACATGGGTGAGAGTTCATCAGGGGGCTCTATTCAT
TCAAACCTAGAGCAAGAAAAGGGGAAGGATAGTGAACCAAAGCCCGATGATGGGAGGAAG
TCCTTTCTAATGAAGAGGGGAGATGTTATCGATTATTCATCATCAGGGGTTTCCACCAAC
GATGCTTCCCCCTGGATCCTATCACTGAAGAAGATGAAAAATCAGATCAGTCAGGCAGT
AAGCTTCTCCCAGCAAGAAATCTTCCGAAAGGTCAAGCCTCTTCCAGACAGATTTGAAG
CTTAAGGGAAGTGGGCTGCGCTATCAAAAACCTCCAAGTGACGAGGATGAATCTGGCACA
GAAGAATCAGATAACACTCCACTGCTCAAAGATGACAAAGACAGAAAAGCCGAAGGGAAA
GTAGAGAGAGTGCCGAAGTCTCCAGAACACAGTGTGAGCCGATCAGAACCTTCATTA
GCCAAAGAGTATTTATCGGATGCGCTCCTTGACAAAAAGGATTTCATCGGATTCAGGAGTG
AGATCCAGTGAAGTTCTCCCACTCTCTGCACAATGAAGTGGCGGATGACTCCCAG
CTTGAAAAGGCAAATCTCATAGAGCTGGAAGATGACAGTCACAGCGGAAAGCGGGGAATC
CCACATAGCCTGAGTGGCCTGCAAGATCCAATTATAGCTCGGATGTCCATTTGTTGAGAA
GACAAGAAAAGCCCTTCCGAATGCAGCTTGATAGCCAGCAGCCCTGAAGAAAACCTGGCCT
GCATGCCAGAAAAGCCTACAACCTGAACCGAACTCCAGCACCGTGACTCTGAACAACAAT
AGTGCTCCAGCCAACAGAGCCAATCAAAATTTGATGAGATGGAGGGAATTAGGGAGACT
TCTCAAGTCATTTGAGGCTAGTTCCAGTCCCAACCAACCACTATTGAGATGAGAAT
CTAAAAAGCATGACACATAAGCGAAGCCAACGTTCAAGTTACACAAGGCTCTCAAAGAT
CCTCCGGAGCTCCATGCAGCAGCCTCTTCTGAGAGCACAGGCTTTGGAGAAGAAAGAGAA
AGCATTCTTTGA
    
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Clone variation with respect to AK022873.1  
1140 t=>g;1153 g=>a

**5' Read Nucleotide Sequence:**

>OriGene 5' read for AK022873 unedited

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ATTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCGCAGGTGGAGTG
GTGTNCAACACAGCCTCACAGCAGCTATTACAGCGGCATGACGGGCCCTCAGCATCCCTT
CTACAACAGGCCATTCTTTGCCCATACCTTTACACGCCAAGGTATTACCCTGGCGGCTC
CCAACATCTCATCTCACGTCCATCAGTAAAAACGAGTTTGCCAGAGATCAGAACAATGG
CCTAGGGTCAGGCCAGCCCCAGGCCAGTGGTATTACTGAATCACTGAATGTGGATGC
AGTATGTGAGAAGCTGAAAACAAATAGAAGGGCTGGACCAGAGTATGCTGCCTCAGTATTG
TACCACGATCAAAAAGGCAAACATAAATGGCCGTGTGTTAGCTCAGTGAACATTGATGA
GCTGAAGAAAGAGATGAATATGAATTTTGGAGACTGGCACCTTTTCAGAAGCACAGTACT
AGAAATGAGAAAACGCAGAAAGCCACGTGGTCCCTGAAGACCCACGTTTCCTCAGTGAGAG
CAGCAGTGGCCCAGCCCCGCACGGTGAGCCTGCTCGCCGCGCTTCCACAACGAGCTGCC
TCACACCGAGCTCTCCAGCCAGACGCCCTACACACTCACTTCAGCTTCAAGAGCTGAA
CACGCTTGGCCTGGATGAAGGTGCCCTCGTCACAGTAATCTAAGTTGGCAGTCACAAAAC
TCGCAAGACCCCAAGTCTTTCGAGTCTCAATCCCAGGATTCCAGTATTGAAATTTCAA
GCCTACCTGATAAGTGCANGCCGAGTATAGAGATGCTATAGAGATACATTGCTCAGATGT
CCATTAGAAGGGGCCCGGGTCTACACCATTATGGCAGATCTCTCCATAGACATATTAC
ATGGTCAG
    
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|                                     |   |
|-------------------------------------|---|
| <b>3' Read Nucleotide Sequence:</b> | >OriGene 3' read for AK022873 unedited<br>NCGGTATATCTATGNACGGCCGCATTCTANGATCGAGTTTTTTTTTTTTTTTTTTGCT<br>AAGCTCACTTAGAAAAGTTGGGCACCATTTAAAAGATTGGAGAACAGACCAGGGTGGCTT<br>CTTGGGCACAGCTGGATGGTGCTGGAAGCCAGGCCTGGGATTTGGAGAGAAGAGTTCCG<br>ACATATAAACCCACGGAGGTACCAGCCCTCCCCGCATCTACTCTCCTAACAGCTCAGGA<br>CAGCCCCGTCACTACTGCCAGCCCTGGTGACTCACTTTGTTGGCAATTTTTAAAGCCC<br>TCTTCATTATGTACTTCTACTCTTCAGAACCTCTGTGATAAGCAATACCCCTGCCATAC<br>AGAACGCTGGATCTCGGTTTACTCAGCCTCTCCCTGTAGCGTCACAGGCTGTGCACTCAC<br>CTAGGTGAGCCCCAAGAGCAGGGTTTGCTTCTGCTTACCTAACGCCACGTCTTCCCTC<br>AAATGTGTGGTCACCAAATGTTTGCAAAAAGGGTCTCTAGCTTTTTTTCTTTTGGCACA<br>TTAAGCCCTTTAAAATACTTCTGACCTATCTTTATACTCAGATCTCACCTCGTCTCAAAA<br>AGTTTTATGGGGTAATGCGCCAATGAAAGGTACAGTAGTATTAGTGAGTTCTGAAGCTTC<br>NTATTACAAGACCACAGAGGCTGGCTGGTGAGCCATGCTTCTCATGCTNCCTTCTGTCA<br>CACTGCAGATGTCTCTTTTACCCTCGCCTCATCATCGGTTAGTTATCTGTCAGCAAAATG<br>TAAAAAGGTGATGGGGCTGGATGGAGTCAAAATCCAGACAATTTCTGTCATAAGGGGTA<br>CAGTACACCTCTTCTCCTTGGCTTGGTTTTCTCAAAGAAGGCTTCTCTTTCTTCTCAA<br>GCC |
| <b>Restriction Sites:</b>           | NotI-NotI   |
| <b>ACCN:</b>                        | AK022873  |
| <b>Insert Size:</b>                 | 3000 bp   |
| <b>OTI Disclaimer:</b>              | 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).  |
| <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>                      | <u><a href="#">AK022873.1</a></u> , <u><a href="#">BAB14285.1</a></u>   |
| <b>RefSeq Size:</b>                 | 2564 bp   |
| <b>RefSeq ORF:</b>                  | 1632 bp   |
| <b>Locus ID:</b>                    | 57498   |
| <b>Cytogenetics:</b>                | 2p25.1  |
| <b>Protein Families:</b>            | Druggable Genome, Transmembrane   |
| <b>Protein Pathways:</b>            | Neurotrophin signaling pathway  |

**Gene Summary:**

This gene encodes a transmembrane protein that is preferentially expressed in the nervous system where it controls neuronal cell survival, differentiation into axons and dendrites, and synaptic plasticity. The encoded protein interacts with membrane receptors, cytosolic signaling components, and cytoskeletal proteins, serving as a scaffold that mediates crosstalk between the neurotrophin pathway and several other intracellular signaling pathways. Aberrant expression of this gene is associated with the onset of various neuropsychiatric disorders and neurodegenerative diseases, including Alzheimer's disease. Naturally occurring mutations in this gene are associated with a syndrome characterized by spastic paraplegia, intellectual disability, nystagmus and obesity. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2017]