

## Product datasheet for MC224114

### Shank2 (NM\_001081370) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Shank2 (NM\_001081370) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Shank2  
**Synonyms:** mKIAA1022; ProSAP1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224114 representing NM\_001081370  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGATGAGCGTCCCCGGCGGTGGAGCAGCCACCGTGATGATGACCGGTTACAATAATGGTCGCTATCCCC  
 GGAATTCTCTACAGTACTGCATTATTGAGGACAAGACGGTGGTCTTGCAAAAAGAAGGACAACGAGGG  
 CTTTGGATTTGTGCTCCGAGGGGCAAAAGCCGATACCCCCATTGAGGAATTCACACCCACGCCAGCATT  
 CCAGCCCTGCAGTACCTGGAGTCCGTGGATGAAGGTGGGGTGGCATGGCAAGCCGGACTAAGGACCGGG  
 ACTTCTTGATTGAGGTTAACAATGAAAATGTCGTCAAGGTGGGCCACAGGCAGGTGGTGAACATGATCCG  
 CCAGGGAGGGAATCACCTCATCCTTAAGGTCGTACGGTGACCAGGAATCTAGACCCTGATGATACAGCC  
 AGAAAGAAAGCTCCCCACCTCCAAAGCGGGCTCCGACCACGGCCCTCACCTGCGTTCCAAGTCCATGA  
 CAGCGGAGTTGGAGGAACTCGTGGACAAAGCCTCAGTCCGGAAGAAGAAGGATAAACCGGAAGAGATAGT  
 CCCAGCCTCAAGCCCTCCAGGACTGCAGAGAACGTGGCCATCGAATCCAGGGTGGCGACCATCAAGCAG  
 CGGCCACAAGCCGGTGCTTCCAGCTGCCTCTGATGTGAATCCGTGTACGAGCGCCAAGGGATTGCTG  
 TAATGACGCCACGGTCCCTGGGAGCCGAAAGGCCATTTCTGGCCCTCCCTCGAGGTACGATGCCAAG  
 GCAGAAATCGATAGACAGCAGAATCTTTCTATCAGGGATAACAGAGGAAGAGCGGCAAGTTTCTGGCTCCC  
 CCAATGCTGAAGTTCACCCGAAGCTTGTCCATGCCAGACACTTCTGAGGACATCCCCCTCCGCCACAGT  
 CTGTGCCCCCTCTCCCCCTCCTTCCCCACCACATAACAAGTGTCCCAGGTCCCGACTCCAAGAGT  
 CTATGGGACAATTAAGCCCGGTTCAATCAGAACCCCGTCTGCGCAAGGTGCCCCAGCCACCAGGTCT  
 GACTGTGGCCACCATGATGCGGGAAAAGGGATGTTCTACAGGAGAGAGCTGGACAGATTTTCCCTGG  
 ACTCAGAAAGCGTCTACAGCCGAGCCCGCCCCACAGGCCGCTTCCGACCAAGCGGGGACAGATGCC  
 TGAGAACCCGTAAGGAGTGGGAAAGATAGCCAGCAAGGCCGCTATGTCCCTGCCAAGCCAGCCAGG  
 CGGAAGGGCGTGTGGTAAAGCAGTCCAACGTGGAGGATAGCCCCGAGAAGACGTGCTCCATACCCATCC  
 CAACCATCATCGTCAAGGAACCTCCACCAGCAGCAGCGCAAGAGCAGCCAGGGGAGCAGCATGGAGAT  
 TGACCCCAAGGCCACCGAGCCCGGCCAGCTGCGGCCAGATGACAGCCTCACCGTCAAGCAGCCCTTTGCT  
 GCGGCCATCGTGGGGCTGTGCGTGACCGGGAGAAGCGTCTGGAAGCCAGGAGGAATTTCCAGCCTTCC



TCTCCACCGACCTGGGAGATGAGGACGTGGGTCTGGGGCCGCCTGCTCCCCGGATGCAGGCCTCCAAGT  
 CCCAGAGGAGGGTGGGTTTGGTGACGAGGATGAGACGGAACAACCGCTGTTGCCTACCCCGGGGCAGCA  
 CCCAGGGAGCTGGAGAATCACTTCTAGGTGGTGGTGAGGCTGGTGCTCAGGGGGAGGCTGGGGACCCC  
 TGAGTTCCACATCCAAGCCAAGGGCCCTGAGAGTGGCCAGCAGCCCCCTCAAGAGCAGCAGCCCAGC  
 CGGCCCTGAGAATTACGTGCACCACTCACAGGGCCGTGCTTGACCCAGCTCCCCACTGGCCCTGGCA  
 CTCTCAGCCAGGACCGACCATGCAGGAGTCCCAGAGGGGCACAAAGGAGAGGGCCCCCAAGGCTGACC  
 TTAACAAGCCTCTACATCGATACCAAAATGCGGCCACGCGTGGAGTCCGGCTTTCCTCCAGTCAACCAG  
 ACAGAACCAGGGGTCCCTGCGACGGCAAGAGACAGAGAACAAGTACGAGACAGACCTGGGCAAGGAC  
 CGGAGGGCGGACGACAAGAACAATGCTGATCAACATCGTGGACACTGCCAGCAGAAGTCAGCTGGCC  
 TACTGATGGTGACACAGTGGACGTCCCATGGCCGGGCCACCCCTGGAGGAAGAGGAGGACAGAGAGGA  
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 CAGATCTCGCTGCCCGGAGCCCGCCGTGCGGCCGGCAGGACCATCGTGGCGGGGGCTCCGTGGAAG  
 AGGCGGTGATTCTGCCATTCGCATCCCCCTCCCCCTGCGCATCCGTGGACTTGGATGAGGACTTTCT  
 TTTACAGAACCCTTGCCTCCCCCTGGAATTCGCAATAGTTTGGATATCCCCGATGACCGGGCAGCT  
 TCAGTTCCGCTCTGGTGACCTGGTCAAGCAGAAGAAAACGACACCCCTCAGCCCCCTACGTTGAACT  
 CCAGCCAAACCAGCAACTCCACAGACAGTAAGAAGCCAGCCGGTATCTCGAACTGTCTGCCCTCCTCGTT  
 CCTGCCACCCCCGAAAGTTTCGATGCAGTCAACGACTCGGGGATTGAGGAGGTGGACAGCCGGAGTAGC  
 AGCGACCACCACTGGAGACTACCAGCACCATCTCCACGGTGTCCAGCATCTCCACGCTGTCTCAGAGG  
 GCGGCGAGAGCATGGACACCTGCACAGTCTATGCAGACGGGAAGCCTTTGTGGTTGACAAGCCCCAGT  
 ACCTCCAAAGCCAAAAATGAAGCCCATCGTTCACAAGAGCAACGCACTTTACCAAGACACGCTCCAGAA  
 GAGGACACGGATGGCTTTGTGATCCCCCACCCTGCACCCCGCCCGCCGGCAGCGCCAGGCCGGTG  
 TGGCGAAGGTCACTCAGCCAAGGACCTCCAAGTTGTGGGTGACGTTCCAGAGGTCAAAGCCCAATTCT  
 CTCAGCCCAAAGGCAAATGTCATTAGTGAGCTAAACTCCATTCTGCAGCAGATGAACAGGGGAAATCG  
 GTCAAGCCCGGGGAAGGGCTGGAGCTGCCGGTGGGAGCCAAGTCCGCCAACCTCGCTCCAAGAAGCCCGG  
 AGGTCATGAGCACCGTCTCAGGTACACGGAGCAGCAGGTCACCTTCACTGTCCGCCCTGGCACCTCCCA  
 GCCCATCACCTGCAGAGCCGGCCCCCGACTATGAAAGCAGAACCTCAGGACCTAGACGCGCCCCAAGC  
 CCTGTGGTTTACCAACGGAATTGAGCAAAGAGATCCTGCCACCCCTCCCCCTCCGTCCGCCACTGCAG  
 CCTCTCCCTCCCCACACTCTCAGATGTCTTAGCCTTCCGAGCCAGTCCCCTGCAGGGGACCTCTTTGG  
 CTTGAACCCAGCAGGACGGAGCAGGTACCATCTCCTTCAATATTGCAACAGCCAATCTCAATAAGCCT  
 TTTACAATAAGCCTGTCCACCTGTGGACGAAACCAGATGTGGCAGACTGGCTGGAAAGTCTGAACTTGG  
 GTGAACACAAGGAGACGTTTCATGGACAATGAGATTGACGGCAGCCACCTGCCAAACCTTCAGAAGGAAGA  
 CTTGATAGATCTGGGGTGAAGTGGGCATAGGATGAACATAGAAAGGGCTTTGAAACAGCTGCTG  
 GACAGATAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-MluI
- ACCN:** NM\_001081370
- Insert Size:** 3789 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:** [NM\\_001081370.2](#), [NP\\_001074839.2](#)

**RefSeq Size:** 5913 bp

**RefSeq ORF:** 3789 bp

**Locus ID:** 210274

**UniProt ID:** [Q80Z38](#)

**Cytogenetics:** 7 F5

**Gene Summary:** Seems to be an adapter protein in the postsynaptic density (PSD) of excitatory synapses that interconnects receptors of the postsynaptic membrane including NMDA-type and metabotropic glutamate receptors, and the actin-based cytoskeleton. May play a role in the structural and functional organization of the dendritic spine and synaptic junction (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) uses an alternate downstream promoter compared to variant 2 and encodes a shorter isoform (a) with a distinct N-terminus compared to isoform b.

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.