

## Product datasheet for **MC224228**

### Stk36 (NM\_175031) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Stk36 (NM\_175031) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Stk36  
**Synonyms:** 1700112N14Rik; B930045J24; FU; Fused; mKIAA1278  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC224228 representing NM\_175031  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGAAAAGTACCACGTTTTGGAGATGATTGGAGAAGGCTCTTTGGGAGAGTGTATAAGGGCCGAAAA  
AATACAGTGCTCAGGTGGTGGCCTTGAAGTTCATCCCAAAGTGGGGCGCTCAGAGAAAGAGCTGAGGAA  
TCTGCAACGAGAGATTGAAATCATGCGGGTCTGTGGCATCCCAACATTGTGCATATGCTCGACAGCTTT  
GAGACTGACAAAGAGGTGGTGGTGGTGACAGACTACGCTGAAGGAGAAGTCTTTTCAGATTCTGGAAGATG  
ATGGAAAAGTCTTGAAGACCAGGTTCCAGGCCATCGCTGCCAGTTGGTGTGAGCTCTGACTACCTGCA  
TTCCACCGCATCCTACACCGGACATGAAACCGCAGAACATTCTTCTCGCCAAGGGTGGTGGCATTAA  
CTTTGTGACTTTGGATTCGCCCAGCTATGAGCACCAACACCATGGTGTGACGTGATCAAGGCACAC  
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CTGCATCTGTATGAGCTGGCTGTGGCAGCCTCCCTTCTACACCACAGCATCTTTAGCTGGTTAGC  
CTCATTCTCAAGGACCTGTGCGCTGGCCTCCACCATTAGTTCCTGCTTCAAGAAGTCTTGCAGGGCC  
TGCTACCAAGGACCCCGCAGCGTCTGTCTGGCCAGACCTTACATCACCCCTTTATTGCCGGCCG  
TGTACCATCATAACTGAACAGCAGGCTCCGATTTGGGACCCCATTTACTAGTCGCCTACCCCCAGAA  
CTTCAGGTCTCAAGGATGAACAGGCGCATCGGCTCGCACCCAAGGGTAACCAAGTCTCGCATCTGCGCC  
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AGAAGACGGGCTCTGCAAGGTGACACCCAGCACAGCCCCGCTGGACTAAAGGCCACTCCTCAGGAG  
TCAAGCCTCTGGCTGGTATACTGGCTTCAAGAAATGAAGAACAAGTGGGAAGACTGGGGGCTGGAGAAG  
CACCCCGTACCTCTCGGAAAACCATCAACCTGGAGTGTGAACAAGGCTTCCAGAGCCGAGGCCAGA  
GGCGATGGCCCGCAGAGCACTGATGTAGTGGATCCTGAAAATGAGGAGCCAGACAGTGTATGATGAGTGG  
CAACGCCTACTAGAGACCAGCAGCCTGGGCTGTGACGCTGAAGTCCCCCTCACCTGTTGTGTAACC  
CTGACTTCTGCCAGCGCATCCAGAGTCACTGCGCGGGACTGGCGAGCAGATCCTGAAAGCGTTCGGA  
TGGTGTGCCACCTCCTTCTGTACTCCGCATCTGAGTGTCTCTATCCAGCTGCAATGACTCTGTG  
CTCTTGTATTCTTCTGCCAGGAGGCGAGGACTGCCTGAGCTGCCTCTCAGCCTTCTTAGGTACAGCCAGG



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AGAGTAGCAGCATCCAGCAGCAACCTTGGTATGGGGCGCTTTACGGGACCTGGTGGCTGTGGTTTCAGGC
CTACTTTTCGTGCACCTTCAATCTGGAGAGGAGCCAGACAGGTGACAGCCTACAGGTGTTTCAGGAGGCC
GCCAGCCTCTTTTGGACCTGTTGGGAAGCTGCTGGCCAATCAGATGATTCCGAGCAGACATTCGAA
GGGATAGCCTTATGTGCTTTGCTGTCTTGTGTGAAGCTGTGGACGGAACAGCTGGGCCGTCTCAAAGC
CTTCTACTCCAGCCTGTTGACCACACAGCGCGTGTGTGGATGGCCTCCTTCACGGCCTGACAGTCCCA
CAGTTCCTTTCCACACACCACCAGGAGCCCCACAAGTGAGCCAGCCGCTGCGGGAGCAGAGTGAAGATG
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CATGGCCCTGAGGCTGCCCGAGGAGGTGTCTGCCAGGAAGACGACCTGCTACTATCAAGTCCCTCCAGC
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TCACCCAGGAGTCCCAGTTATGCCTGAGCCACCTGTCCAGCATGGCAGTGTCTCATGTGACCCTGAA
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GTGGTGTCTCCGTGTCAAGCTGCTCTGCTTCCCTTTGGCCTGGATGTGGATGCTGACCTCCTGTAG
GTGCTTGGCTGACCTCAGGGCCTCGGAAGTGGTAGTCTGCCTGCTGCAGTCTGCTGCCACCACCTTTC
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CAGTTTTGTGAACACAGTGGCCACCTCTTAGAGCCATCATCTCATTCTCTGTGTTCTCTGAGTG
ACCAGCCCTCATGATCTCTGACCTCCTGTCCCTGCTGACACACACAGCCCGATTCTGTCCCCAGCCA
CTTGCTCTTTATCCAAGAGCTCCTGTCTGGCTCTGATGAATCCTATCGGCCATTGCGCAGCCTCCTAGGC
CACTCAGAGAACACTGTGCGGGTCCGTGCATATGGGCTCCTGGGACATTTATTACAGCACAGCATGGCCC
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TGCCGTGCGACGAGTCCAGCTTTGCTGTGGCAATGCAGCCTACCAGGCTGGGCCCTTTGGACCTGCC
TTGGCAGTGCAGTCCAGTATGACCCAGCTGCTTGGAGATGCTCAGGATGGGATCCGGCGCAATGCTG
CATCAGCTCTAGGCAATCTGGGACTGAAGGATTGGGCAAGGAGCTATTAAGTGCCAAGTACCCAGCG
GCTCCTAGAAATGGCATGTGGAGACCCTCAGCCAAGTGTCAAAGAGGCTGCCCTCATTGCCCTTCGAAGC
CTCCAACAGGAGTCTGTATTATCAGGTGCTGGTGTGCTGGTGGCAGTGAGAAGTTAGCCTTGTCTCT
CTTTGGGGAATCAGTTACTGCCGAATAGCAGCAACAGGCTGCCTCCGTGAGACTGCAGGAAGTCCAT
CCAACCTCTGAGGCCAACCCACAGCACATGA
    
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**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_175031
- Insert Size:** 3951 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\\_175031.3](#), [NP\\_778196.2](#)

**RefSeq Size:** 5329 bp

**RefSeq ORF:** 3951 bp

**Locus ID:** 269209

**UniProt ID:** [Q69ZM6](#)

**Cytogenetics:** 1 C4

**Gene Summary:** Serine/threonine protein kinase which plays an important role in the sonic hedgehog (Shh) pathway by regulating the activity of GLI transcription factors. Controls the activity of the transcriptional regulators GLI1, GLI2 and GLI3 by opposing the effect of SUFU and promoting their nuclear localization. GLI2 requires an additional function of STK36 to become transcriptionally active, but the enzyme does not need to possess an active kinase catalytic site for this to occur. Required for postnatal development, possibly by regulating the homeostasis of cerebral spinal fluid or ciliary function. Essential for construction of the central pair apparatus of motile cilia.[UniProtKB/Swiss-Prot Function]