

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
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC224228 representing NM_175031 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAAAGTACCACGTTTTGGAGATGATTGGAGAAGGCTCTTTGGGAGAGTGTATAAGGGCCGAAAAA
AATACAGTGCTCAGGTGGTGGCCTTGAAGTTCATCCCAAAGTGGGGCGCTCAGAGAAAGAGCTGAGGAA
TCTGCAACGAGAGATTGAAATCATGCGGGTCTGTGGCATCCCAACATTGTGCATATGCTCGACAGCTTT
GAGACTGACAAAGAGGTGGTGGTGGTACAGACTACGCTGAAGGAGAAGCTTTTCAGATTCTGGAAGATG
ATGGAAAAGTTCCTGAAGACCAGGTTCCAGCCATCGCTGCCAGTTGGTGTGAGCTCTGACTACCTGCA
TTCCACCGCATCCTACACCGCGACATGAAACCGCAGAACATTCTTCGCAAGGGTGGTGGCATTAA
CTTTGTGACTTTGGATTCGCCGAGCTATGAGCACCAACACCATGGTGTGACTGATCAAGGCACAC
CGCTCTATATGTCTCCAGAGCTGGTGGAGGAGCGACCATATGACCACACCGCAGACCTCTGGTCTGTGGG
CTGCATCTGTATGAGCTGGCTGTGCGCACGCCTCCCTTCTACACCACAGCATCTTTCAGCTGGTTAGC
CTCATTCTCAAGGACCTGTGCGCTGGCCCTCCACCATAGTTCTGTCTCAAGAAGTCTTTCAGGGGGC
TGCTCACCAAGGACCCCGCAGCGTCTGTCTGGCCAGACCTTTACATCACCCCTTTATTGCCGGCCG
TGTCACCATCATAACTGAACCAGCAGGCTCCGATTTGGCACCCCAATTTACTAGTCGCCTACCCCCAGAA
CTTCAGGTCCTCAAGGATGAACAGGCGCATCGGCTCGCACCAAGGTAACCAAGTCTCGATCCTGCGCC
AGGCTGTAAACTCATGGCTGAAGAAGCCAAGCAGAAGGAAGACCAAAAATGCAGGATCTGCCCTTGAACA
AGAAGACGGGCTCTGCAAGGTGACACCCAGCACAGCCCCGTCGCTGGACTAAAGGCCACTCCTCAGGAG
TCAAGCCTCTGGCTGGTATACTGGCTTCAAGAAATGAAGAACAAGTGGGAAGACTGGGGGCTGGAGAAG
CACCCCGTACCTCTCGGAAAACCATCAACCTGGAGTGTGAACAAGGCTTCCAGAGCCGAGGCCAGA
GGCGATGGGCCGAGAGCACTGATGTAGTGGATCCTGAAAATGAGGAGCCAGACAGTGTATGAGTGG
CAACGCCTACTAGAGACCAGCGAGCCTGGGCTGTGCAGCTGAAGTCCCCCTCACCTGTTGTGTAACC
CTGACTTCTGCCAGCGCATCCAGAGTCACTGCGCGGGACTGGCAGCAGATCCTGAAAGCGTCTGGA
TGTTGTGTCCACCTCTTCTGTACTCCGCATCTGAGTGTCTCTATCCAGTGCATGACTCTGTG



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CTCTTGATTCTCTGCCAGGAGGCAGGACTGCCTGAGCTGCCTCTCAGCCTTCTTAGGTACAGCCAGG
 AGAGTAGCAGCATCCAGCAGCAACCTTGGTATGGGGCGCTTTACGGGACCTGGTGGCTGTGGTTACGGC
 CTACTTTTCGTGCACCTTCAATCTGGAGAGGAGCCAGACAGGTGACAGCCTACAGGTGTTTCAGGAGGCC
 GCCAGCCTCTTTTTGGACCTGTTGGGGAAGCTGCTGGCCCAATCAGATGATTCGGAGCAGACATTCGAA
 GGGATAGCCTTATGTGCTTTGCTGTCTTGTGTGAAGCTGTGGACGAAACAGCTGGGCCGTCTCAAAGC
 CTTCTACTCCAGCCTGTTGACCACACAGCGCGCTGTGTTGGATGGCCTCCTTACGGCCTGACAGTCCCA
 CAGCTTCCCTTCCACACACCACCAGGACCCCAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGTGAAGT
 TACCTGGAGCCATCTCTTCTGCCCTGGCAGCCATGTGTACTGCTCCTGTGGGGCTGCCAGCTGTTGGGA
 TGCCAAGGAGCAGGTCTCTTGGCATTGGCCAACCAGCTAACTGAAGACAGCAGCCAACCTGAGGCCATCC
 CTCATCTCTGGTCTGCGACACCATGTCCTGTGCCTCCACCTTCTCAAGGTTCTCTACGCCTGCTGTATA
 TTAGTGAGCGCCTGTGCCATATTCTGGGGCAAGAGCCCTGGCCTGGAGTCGCTGTATGTTAGTCCA
 GGGCAAGGTGAAAGTAGCAGATTGGGAAGAGTCCACTGAGGTGGCACTTACCTCTGTCCCTTCTGTGTC
 TTTCCGGCTCAAGATCTGCCTCAGGGATGGAGAAGCTGGGCAGTGAGGTTGCTACTCTCTTACCCT
 CACATGTCGTCTCTTGTGAATGCGGCAGCCTGTCTTAGGACAGCTGGTCAGCAAGGGGTGACCTT
 TGACCTCCAGCCCGGAATGGATTGCTGCAGCTGCACATGCCTGTCTGCCCTGCAGAGTCCGGCTG
 ACTCCGCCGTATAGTTGTGGCTTCTATGATGGCCTCCTATTCTCCTGCTTCAGCTTCTTATGCAGGTAC
 AGGGGAAGCCTGGCCTGATCAGGGATGTGGTTGGTTGAGAGGTGTGGACCATTCTGTGGCACCGCTTTTC
 CATGGCCCTGAGGCTGCCGAGGAGGTGTCTGCCAGGAAGACGACCTGCTACTATCAAGTCCCTCCAGC
 CTAGAGCCAGACTGGACACTGATTTACCCCAAGGCATGGCAGCCTTGTGAGCCTGGCCATGGCCATCT
 TCACCCAGGAGTCCCAGTTATGCCTGAGCCACCTGTCCAGCATGGCAGTGTCTCATGCTGACCCTGAA
 GCACCTGCTTTCACCCAGCTTCTTGACCACCTGAGCCAGGCGCCGAGGGGCCGAGTTTCTCCCGTT
 GTGGTCTCCGTGTGCAAGCTGCTCTGCTTCCCTTTGCCCTGGATGTGGATGCTGACCTCCTGTAG
 GTGTCTTGGCTGACCTCAGGGCCTCGGAAGTGGTAGTCTGCCTGCTGCAGTCTGCTGCCACCCTTTC
 GTTGTACAAGCAGAGCTGCCATTGGCCTCCTTACACGCTGGCCCTCAGGATTCTGCCTCTCTCAAG
 CAGTTTGTGAACACAGTGGCCACCTCTTAGAGCCATCATCTATTCTCTCTGTTTCTCTGAGTG
 ACCAGCCCTCATGATCTCTGACCTCCTGTCCCTGCTGACACACACAGCCGGATTCTGTCCCCAGCCA
 CTTGTCTTTATCCAAGAGCTCCTGTCTGGCTCTGATGAATCCTATCGGCCATTGCGCAGCCTCCTAGGC
 CACTCAGAGAACACTGTGCGGGTCCGTGCATATGGGCTCCTGGGACATTTATTACAGCACAGCATGGCC
 TACGTGGGCACTACAGAGTCAGTCAGGACTGCTCAACCTTCTGTGCTAGGGCTGGAGACAAGGACCC
 TGCCGTGCGACGAGTCCAGCTTTGCTGTGGCAATGCAGCCTACCAGGCTGGGCTTTGGGACCTGCC
 TTGGCAGCTGCAGTCCAGTATGACCCAGCTGCTTGGAGATGCTCAGGATGGGATCCGGCGCAATGCTG
 CATCAGCTCTAGCAATCTGGGACCTGAAGATTGGGCAAGGAGCTATTAAGTGGCAAGTACCCAGCG
 GCTCCTAGAAATGGCATGTGGAGACCCTCAGCCAAGTGTCAAAGAGGCTGCCCTCATTGCCCTTCGAAGC
 CTCCAACAGGAGTCTGTATTATCAGGTGCTGGTGTGCTGGTGGCAGTGAGAAGTTAGCCTTGTCTCT
 CTTTGGGGAATCAGTTACTGCCGAATAGCAGCAACAGGCTGCCTCCGTGAGACTGCAGGAAGCTCAT
 CCAACTCTGAGGCCAACCCACAGCACATGA

ACGGCTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 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]