

## Product datasheet for **MC223136**

### Stk36 (BC043103) Mouse Untagged Clone

#### Product data:

Product Type: Expression Plasmids  
 Product Name: Stk36 (BC043103) Mouse Untagged Clone  
 Tag: Tag Free  
 Symbol: Stk36  
 Synonyms: FU, MGC58023, B930045J24  
 Vector: pCMV6-Entry (PS100001)  
 E. coli Selection: Kanamycin (25 ug/mL)  
 Cell Selection: Neomycin  
 Fully Sequenced ORF: >BC043103  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAAAAGTACCACGTTTTGGAGATGATTGGAGAAGGCTCTTTGGGAGAGTGTATAAGGGCCGAAAA  
 AATACAGTGCTCAGGTGGTGGCCTTGAAGTTCATCCCAAAGTGGGGCGCTCAGAGAAAGAGCTGAGGAA  
 TCTGCAACGAGAGATTGAAATCATGCGGGTCTGTGGCATCCCAACATTGTGCATATGCTCGACAGCTTT  
 GAGACTGACAAAGAGGTGGTGGTGGTGACAGACTACGCTGAAGGAGAAGCTTTTCAGATTCTGGAAGATG  
 ATGGAAAAGTTCCTGAAGACCAGGTTCCAGGCCATCGCTGCCAGTTGGTGTGAGCTCTGACTACCTGCA  
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 CTTTGTGACTTTGGATTCGCCCAGCTATGAGCACCAACACCATGGTGTGACGTGATCAAGGCACAC  
 CGCTCTATATGTCTCCAGAGCTGGTGGAGGAGCGACCATATGACCACACCGCAGACCTCTGGTCTGTGG  
 CTGCATCTGTATGAGCTGGCTGTGGCAGCCTCCCTTCTACACCACAGCATCTTTCAGCTGGTTAGC  
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 TGGTGTGCCACCTCCTTCTGTACTCCGCATCCTGAGTGTCTCTATCCAGCTGCAATGACTCTGTG  
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AGAGTAGCAGCATCCAGCAGCAACCTTGGTATGGGGCGCTTTACGGGACCTGGTGGCTGTGGTTCAGGC
CTACTTTTCGTGCACCTTCAATCTGGAGAGGAGCCAGACAGGTGACAGCCTACAGGTGTTTCAGGAGGCC
GCCAGCCTCTTTTTGGACCTGTTGGGAAGCTGCTGGCCCAATCAGATGATTCCGAGCAGACATTTGAA
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CTTCTACTCCAGCCTGTTGACCACACAGCGCGTGTGTGGATGGCCTCCTTACGGCCTGACAGTCCCA
CAGCTTCTTTCCACACACCACCAGGAGCCCCACAAGTGAGCCAGCCGCTGCGGGAGCAGAGTGAAGATG
TACCTGGAGCCATCTCTTGGCCTGGCAGCCATGTGTACTGCTCCTGTGGGGCTGCCAGCTGTTGGGA
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AGGAGTCCCAGTTATGCCTGAGCCACCTGTCCAGCATGGCAGTGTCTCATGCTGACCTGAAGCACCT
GCTTTCACCCAGCTTCTTGACCACCTGAGCCAGGCGCCGAGGGGCCGAGTTTCTCCCGTTGTGGTG
CTCTCCGTGTGAAGCTGCTCTGCTTCCCTTTGGCCCTGGATGTGGATGCTGACCTCCTTGTAGGTGCT
TGGCTGACCTCAGGGCCTCGGAAGTGGTAGTCTGCCTGCTGCAGGTCTGCTGCCACCACCTTTCGTTGTT
ACAAGCAGAGCTGCCATTGGCCTCCTTACACGCCTGGCCCTCAGGATTCTGCCTCTCTCAGCGGCCG
TCGCTACCTTAG
    
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
    
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- Restriction Sites:** SgfI-MluI
- ACCN:** BC043103
- Insert Size:** 3162 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:** [BC043103](#), [AAH43103](#)
- RefSeq Size:** 3378 bp

RefSeq ORF: 3161 bp

Locus ID: 269209

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]