

Product datasheet for **MG227370**

Twist1 (NM_011658) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Twist1 (NM_011658) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Twist1
Synonyms: bHLHa; bHLHa38; M-Twi; M-Twist; pd; Pde; pdt; Pluri; Ska; Ska10; Skā Twist
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG227370 representing NM_011658
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATGCAGGACGTGTCCAGCTCGCCAGTCTCTCCGGCCGACGACGCCTGAGCAACAGCGAGGAGGAGC
 CGGACCGGCAGCAGCCGGCGAGCGGCAAGCGGGGCTCGCAAGAGACGCAGCAGTCGGCGCAGCGCGGG
 CGGCAGCGCGGGCCCGCGGGCCACGGGCGGGGATCGGAGGCGGCAGGAGCCAGGACGCCCGGCC
 CAGGGCAAGCGGCAAGAAATCTCGGGCGGAGCGGGCGGGCGGGCGGGCGGGCGGAGGTGGTGGCGGC
 GCGGCGGCAGCAGCAGCGGGGCGGAGCCCGCAGTCGTACGAGGAGCTGCAGACCCAGCGGGTCATGGC
 TAACGTGCGGGAGCGCCAGCGCACGCAGTCGCTGAACGAGGCGTTCGCCGCCCTGCGCAAGATCATCCCC
 ACGCTGCCCTCGGACAAGCTGAGCAAGATTCAGACCCTCAAAGTGGCGGCCAGGTACATCGACTTCTGT
 ACCAGGTCCTGCAGAGCGACGAGCTGGACTCCAAGATGGCAAGCTGCAGCTATGTGGCCACGAGCGGCT
 CAGCTACGCCCTTCTCGTCTGGAGGATGGAGGGGCGCTGGTCCATGTCCGCGTCCCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG227370 representing NM_011658
 Red=Cloning site Green=Tags(s)

MMQDVSSSPVSPADDSLSNSEEPDRQQPASGKRGARKRRSSRRSAGGSAGPGGATGGGIGGGDEPGSPA
 QGKRGKKSAGGGGGGAGGGGGGGSSGGGSPQSYEELQTRVMANVRERQRTQSLNEAFAALRKIIP
 TLPDKLSKIQLKLAARYIDFLYQVLQSDDELDSKMASCSYVAHERLSYAFSVWRMEGAWSMSASH

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_011658

ORF Size: 618 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_011658.2](#), [NP_035788.1](#)

RefSeq Size: 1665 bp

RefSeq ORF: 621 bp

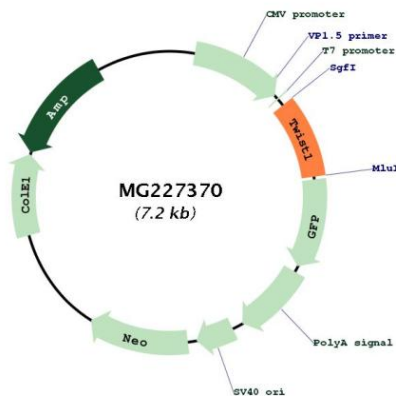
Locus ID: 22160

UniProt ID: [P26687](#)

Cytogenetics: 12 14.81 cM

Gene Summary: Basic helix-loop-helix (bHLH) transcription factors have been implicated in cell lineage determination and differentiation. This gene encodes a bHLH transcription factor that is evolutionarily conserved from invertebrates to humans, and was originally identified in *Drosophila* as an essential gene involved in early mesoderm development and dorsal-ventral patterning in the embryo. This protein plays a role in cancer by regulating the epithelial-mesenchymal transition (EMT), a process that is critical for metastasis initiation, and promoting tumor progression. Mutations in the human gene are associated with Saethre-Chotzen syndrome (SCS). Mice with heterozygous mutations in this gene exhibit cranofacial and structural defects similar to those seen in human SCS patients. [provided by RefSeq, Sep 2015]

Product images:



Circular map for MG227370