

Protein Sequence: >RG201123 representing NM_004316
 Red=Cloning site Green=Tags(s)

MESSAKMESGGAGQQPQPQPFLPPAACFFATAAAAAAAAAAAAAQSAQQQQQQQQQQAPQLRPAA
 DGQPSGGGHSAPKQVKRQRSSPELMRCKRRLNFSGFGYSLPQQQPAAVARRNERERNRVLVNLGFAT
 LREHVPNGAANKKMSKVETLRSAVEYIRALQQLLDEHDAVSAAFQAGVLSPTISPNYSNDLNSMAGSPVS
 SYSSDEGSYDPLSPEEQELLDFTNWF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004316

ORF Size: 708 bp

OTI Disclaimer: 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_004316.4](#)

RefSeq Size: 2482 bp

RefSeq ORF: 711 bp

Locus ID: 429

UniProt ID: [P50553](#)

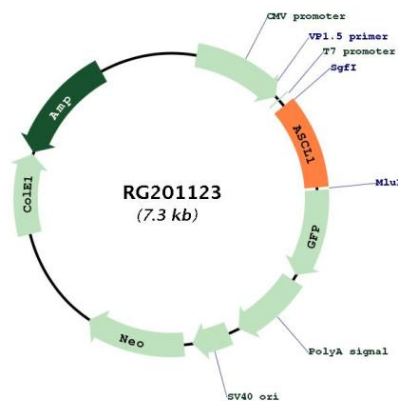
Cytogenetics: 12q23.2

Domains: HLH

Protein Families: Druggable Genome, Transcription Factors

Gene Summary: This gene encodes a member of the basic helix-loop-helix (BHLH) family of transcription factors. The protein activates transcription by binding to the E box (5'-CANNTG-3'). Dimerization with other BHLH proteins is required for efficient DNA binding. This protein plays a role in the neuronal commitment and differentiation and in the generation of olfactory and autonomic neurons. Mutations in this gene may contribute to the congenital central hypoventilation syndrome (CCHS) phenotype in rare cases. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG201123