

Product datasheet for **RC207029**

Neurogenin 1 (NEUROG1) (NM_006161) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Neurogenin 1 (NEUROG1) (NM_006161) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Neurogenin 1
Synonyms:	AKA; bHLHa6; Math4C; NEUROD3; ngn1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207029 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCAGCCCGCCTTGAGACCTGCATCTCCGACCTCGACTGCGCCAGCAGCAGCGGCAGTGACCTATCCG
GCTTCCTCACCGACGAGGAAGACTGTGCCAGACTCCAACAGGCAGCCTCCGTTTCGGGGCCGCCCGCGCC
GGCCCGCAGGGGCGCGCCAATATCTCCCGGGCGTCTGAGGTTCCAGGGGCACAGGACGACGAGCAGGAG
AGGCGGCGCGCCGCGGGCGGACGCGGGTCCGCTCCGAGGCGCTGCTGCACTCGCTGCGCAGGAGCCGGC
GCGTCAAGGCCAACGATCGCGAGCGCAACCGCATGCACAATTGAACGCGGCCCTGGACGCACTGCGCAG
CGTGCTGCCCTCGTTCCCGACGACACCAAGCTCACAAAATCGAGACGCTGCGCTTCGCCTACAACCTAC
ATCTGGGCTCTGGCCGAGACACTGCGCCTGGCGGATCAAGGGCTGCCCGGAGGCGGTGCCCGGAGCGCC
TCTGCCCGCCGAGTGCCTCCCTGCCTGCCCGGTCCCCAAGCCCCGCCAGCGACGCGGAGTCTCTGGGG
CTCAGGTGCCCGCCGCGCTCCCGCTCTTGACCCAGTAGCCAGCCGCTCCGAAGACTTCACTAC
CGCCCCGGCGACCCTGTTTTCTCCTTCCCAAGCCTGCCAAAGACTTGCTCCACACAACGCCCTGTTTCA
TTCCTTACCAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC207029 protein sequence
 Red=Cloning site Green=Tags(s)

MPARLETICISDLDCASSSGSDLGFLTDEEDCARLQQAASASGPPAPARRGAPNISRASEVPGAQDDEQE
 RRRRRGRTRVRSEALLHSLRRSRRVKANDRERNMHNLNAALDALRSVLPSPFDDTKLTKIETLRFAYNY
 IWALAE TLRLADQGLPGGGARERLLPPQCVPLPGPPSPASDAESWGSAAAAASPLSDPSSPAASEDFTY
 RRGDPVFSFPSLPKDLLHTTPCFIPYH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6192_f04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006161

ORF Size: 711 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_006161.3](#)

RefSeq Size: 1717 bp

RefSeq ORF: 714 bp

Locus ID: 4762

UniProt ID: [Q92886](#)

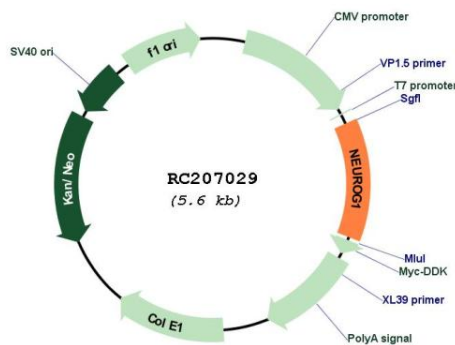
Cytogenetics: 5q31.1

Protein Families: Druggable Genome, ES Cell Differentiation/IPS, Transcription Factors

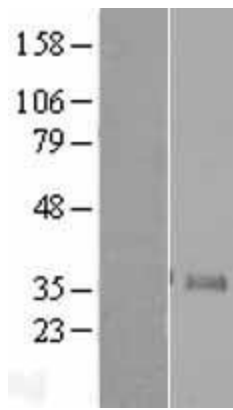
MW: 25.7 kDa

Gene Summary: Acts as a transcriptional regulator. Involved in the initiation of neuronal differentiation. Activates transcription by binding to the E box (5'-CANNTG-3'). Associates with chromatin to enhancer regulatory elements in genes encoding key transcriptional regulators of neurogenesis (By similarity).[UniProtKB/Swiss-Prot Function]

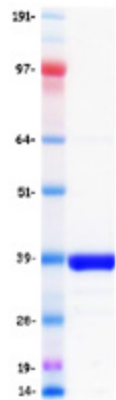
Product images:



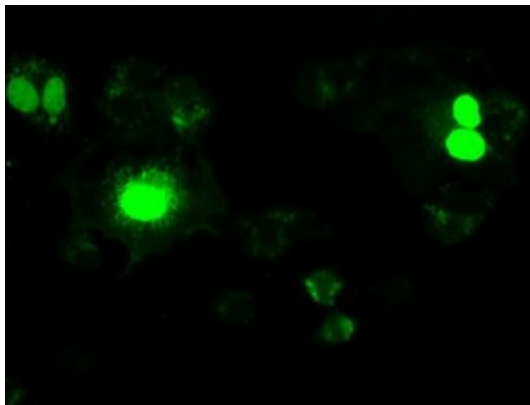
Circular map for RC207029



Western blot validation of overexpression lysate (Cat# [LY401855]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207029 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NEUROG1 protein (Cat# [TP307029]). The protein was produced from HEK293T cells transfected with NEUROG1 cDNA clone (Cat# RC207029) using MegaTran 2.0 (Cat# [TT210002]).



Anti-NEUROG1 mouse monoclonal antibody ([TA500305]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY NEUROG1 (RC207029).