

Product datasheet for SC335421

GAPDH (NM 001289746) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: GAPDH (NM_001289746) Human Untagged Clone

Tag: Tag Free Symbol: GAPDH

Synonyms: G3PD; GAPD; HEL-S-162eP

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC335421 representing NM_001289746.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGGGAAGGTGAAGGTCGGAGTCAACGGATTTGGTCGTATTGGCCGCCTGGTCACCAGGGCTGCTTTT
AACTCTGGTAAAGTGGATATTGTTGCCATCAATGACCCCTTCATTGACCTCAACTACATGGTTTACATG
TTCCAATATGATTCCACCCATGGCAAATTCCATGGCACCGTCAAGGCTGAGAACGGGAAGCTTGTCATC
AATGGAAATCCCATCACCATCTTCCAGGAGCGAGATCCCTCCAAAATCAAGTGGGGCGATGCTGGCGCT
GAGTACGTCGTGGAGTCCACTGGCGTCTTCACCACCATGGAGAAGGCTTGGTCATTGCAGGGGGGA
GCCAAAAGGGTCATCATCTCTGCCCCCTCTGCTGATGCCCCCATGTTCGTCATGGGTTGAACCATGAG
AAGTATGACAACAGCCTCAAGATCATCAGCAATGCCTCCTGCACCACCAACTGCTTAGCACCCCTGGCC
AAGGTCATCCATGACAACTTTGGTATCGTGGAAGGACTCATGACCACAGTCCATGCCATCACTGCCACC
CAGAAGACTGTGGATGGCCCCTCCGGGAAACTGTGGCGTGATGGCCGCGGGGCTCTCCAGAACATCATC
CCTGCCTCTACTGGCGCTGCCAAGGCTGTGGGCAAGGTCATCCCTGACCTGCCGTCTAGAAAAACCTGCC
AAATATGATGACATCAAGAAGGTGGTGAAGCAGGCGTCGGAGGGCCCCCTCAAGGGCATCCTGGGCTAC
ACTGAGCACCAGGTGGTCTCCTCTGACTTCAACAGCGACCCACTCCTCCACCTTTTGACGCTGGGGCT
GGCATTGCCCTCAACGACCACTTTTGTCAACAGCGAACCCACTCCTCCACCTTTTGACGCTAGCAAC

AGGGTGGTGGACCTCATGGCCCACATGGCCTCCAAGGAGTAA

ACGCGTACGCGCCCCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul



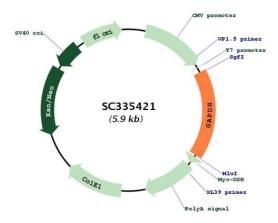
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Plasmid Map:



ACCN: NM_001289746

Insert Size: 1008 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.

RefSeg: NM 001289746.1

RefSeq Size: 1407 bp
RefSeq ORF: 1008 bp
Locus ID: 2597
UniProt ID: P04406

Cytogenetics: 12p13.31



GAPDH (NM_001289746) Human Untagged Clone - SC335421

Protein Families: ES Cell Differentiation/IPS

2014]

Protein Pathways: Alzheimer's disease, Glycolysis / Gluconeogenesis, Metabolic pathways

MW: 36.1 kDa

Gene Summary: This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein

family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against E. coli, P. aeruginosa, and C. albicans. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov

Transcript Variant: This variant (4) differs in the 5' UTR, compared to variant 1. Variants 1, 3,

and 4 encode the same isoform (1).