

Product datasheet for RG210606

OriGene Technologies, Inc.

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alpha Synuclein (SNCA) (NM_000345) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: alpha Synuclein (SNCA) (NM 000345) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: alpha Synuclein

Synonyms: NACP; PARK1; PARK4; PD1

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG210606 representing NM_000345

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG210606 representing NM_000345

Red=Cloning site Green=Tags(s)

MDVFMKGLSKAKEGVVAAAEKTKQGVAEAAGKTKEGVLYVGSKTKEGVVHGVATVAEKTKEQVTNVGGAV VTGVTAVAQKTVEGAGSIAAATGFVKKDQLGKNEEGAPQEGILEDMPVDPDNEAYEMPSEEGYQDYEPEA

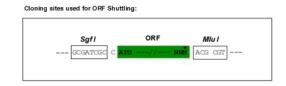
TRTRPLE - GFP Tag - V

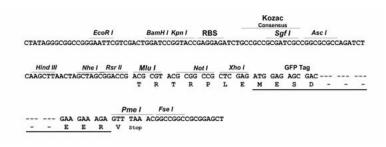
Restriction Sites: Sgfl-Mlul





Cloning Scheme:





ACCN: NM_000345

ORF Size: 420 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: <u>NM 000345.4</u>

RefSeq Size: 1543 bp RefSeq ORF: 423 bp



Locus ID: 6622
UniProt ID: P37840
Cytogenetics: 4q22.1
Domains: Synuclein

Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, Parkinson's disease

Gene Summary: Alpha-synuclein is a member of the synuclein family, which also includes beta- and gamma-

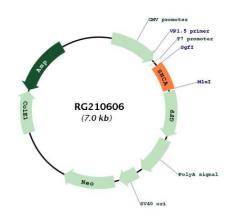
synuclein. Synucleins are abundantly expressed in the brain and alpha- and beta-synuclein inhibit phospholipase D2 selectively. SNCA may serve to integrate presynaptic signaling and

membrane trafficking. Defects in SNCA have been implicated in the pathogenesis of

Parkinson disease. SNCA peptides are a major component of amyloid plaques in the brains of patients with Alzheimer's disease. Alternatively spliced transcripts encoding different isoforms

have been identified for this gene. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RG210606