

## Product datasheet for RC228736

### alpha Synuclein (SNCA) (NM\_001146055) Human Tagged ORF Clone

#### Product data:

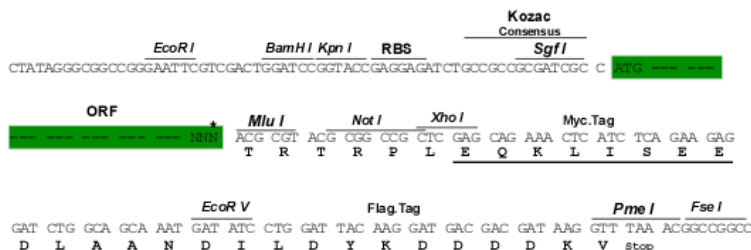
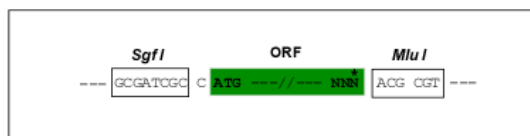
|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | alpha Synuclein (SNCA) (NM_001146055) Human Tagged ORF Clone  |
| Tag:                      | Myc-DDK   |
| Symbol:                   | alpha Synuclein   |
| Synonyms:                 | NACP; PARK1; PARK4; PD1   |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| ORF Nucleotide Sequence:  | <p>&gt;RC228736 representing NM_001146055<br/> <b>Red</b>=Cloning site <b>Blue</b>=ORF <b>Green</b>=Tags(s)</p> <p>TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC<b>CGATCGCC</b></p> <p><b>ATGGATGTATT</b>CATGAAAGGACTTTCAAAGGCCAAGGAGGGAGTTGTGGCTGCTGCTGAGAAAACCAAACAGGGTGTGGCAGAAGCAGCAGGAAAGACAAAAGAGGGTGTCTCTATGTAGGCTCCAAAACCAAGGAGGGAGTGGTGCATGGTGTGGCAACAGTGGCTGAGAAGACCAAAGCAAGTGACAAATGTTGGAGGAGCAGTGTGACGGGTGTGACAGCAGTAGCCAGAAGACAGTGGAGGGAGCAGGGAGCATTGCAGCAGCCACTGGCTTGTCAAAAAGGACCAGTTGGCAAGAATGAAGAAGGAGCCCCACAGGAAGGAATTCTGGAAGATATGCCGTGGATCCTGACAATGAGGCTTATGAAATGCCTTCTGAGGAAGGGTATCAAGACTACGAACCTGAAGCC</p> <p><b>ACGCGT</b>ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA</p> |
| Protein Sequence:         | <p>&gt;RC228736 representing NM_001146055<br/> <b>Red</b>=Cloning site <b>Green</b>=Tags(s)</p> <p>MDVFMKGLSKAKEGVVAAAEKTKQGVAAEAGKTKEGVL YVGSKTKEGVVHG VATVAEKTKEQVTNVGGAVVTGVTAVAQKTVEGAGSIAAATGFVKDQLGKNEEGAPQEGILEDMPVDPDNEAYEMPSEEGYQDYEPEA</p> <p><b>TR</b>TRPLEQKLISEEDLAANDILDYKDDDDKV</p>  |
| Chromatograms:            | <a href="https://cdn.origene.com/chromatograms/mg2667_b04.zip">https://cdn.origene.com/chromatograms/mg2667_b04.zip</a>   |
| Restriction Sites:        | Sgfl-Mlul   |



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**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001146055

**ORF Size:** 420 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](mailto: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).

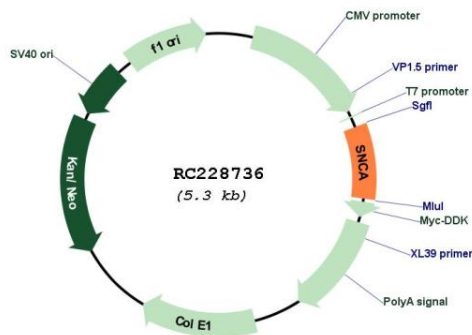
**Reconstitution Method:**

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.

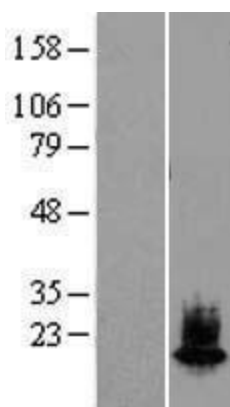
**RefSeq:** [NM\\_001146055.2](#)  
**RefSeq ORF:** 423 bp  
**Locus ID:** 6622  
**UniProt ID:** [P37840](#)  
**Cytogenetics:** 4q22.1  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Alzheimer's disease, Parkinson's disease  
**MW:** 14.3 kDa

**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]

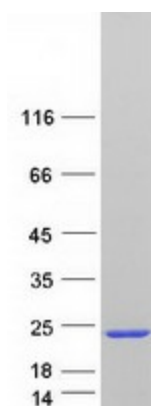
### Product images:



Circular map for RC228736



Western blot validation of overexpression lysate (Cat# [LY431764]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228736 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SNCA protein (Cat# [TP328736]). The protein was produced from HEK293T cells transfected with SNCA cDNA clone (Cat# RC228736) using MegaTran 2.0 (Cat# [TT210002]).