

Product datasheet for **RC216443**

Presenilin 1 (PSEN1) (NM_000021) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Presenilin 1 (PSEN1) (NM_000021) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Presenilin 1
Synonyms:	ACNINV3; AD3; FAD; PS-1; PS1; S182
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC216443 representing NM_000021
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGACAGAGTTACCTGCACCGTTGTCTACTTCCAGAATGCACAGATGTCTGAGGACAACCACCTGAGCA
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 TGAGCCATTATCTAATGGACGACCCAGGGTAACTCCCGCAGGTGGTGGAGCAAGATGAGGAAGAAGAT
 GAGGAGCTGACATTGAAATATGGCGCCAAGCATGTGATCATGCTCTTTGTCCCTGTGACTCTCTGCATGG
 TGGTGGCTGGTACCATTAAGTCAGTCAGCTTTTATACCCGGAAGGATGGGCAGCTAATCTATACCCC
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 C

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence:

>RC216443 representing NM_000021
 Red=Cloning site Green=Tags(s)

MTLPAPLSYFQNAQMSDNHLSNTVRSQNDNRERQEHNDRSLGHPEPLSNGRPQGNRSRQVVEQDEED
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 SVIVVMTILLVLYKYRCYKVIHAWLIISLLLLFFFYIYLGEVFKTYNVAVDYITVALLIWNFGVVG
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 TLFPALIYSSTMVWLVNMAEGDPEAQRVSKNSKYNAESTERESQDTVAENDDGGFSEWEAQRDShLGP
 HRSTPESRAAVQELSSSILAGEDPEERGVKLGDFIFYSVLVGKASATASGDWNTTIACFVAILIGLCL
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Chromatograms:

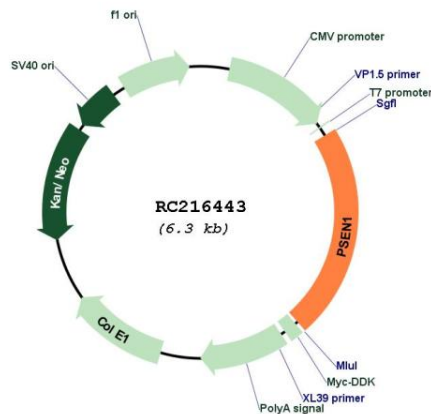
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Restriction Sites:

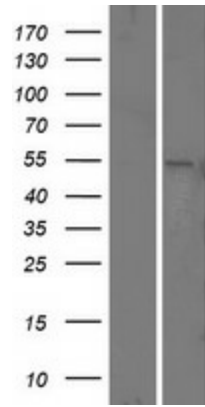
Sgfl-Mlul

RefSeq:	NM_000021.4
RefSeq Size:	2763 bp
RefSeq ORF:	1404 bp
Locus ID:	5663
UniProt ID:	P49768
Cytogenetics:	14q24.2
Domains:	Presenilin, PSN
Protein Families:	Druggable Genome, Protease, Transmembrane
Protein Pathways:	Alzheimer's disease, Neurotrophin signaling pathway, Notch signaling pathway, Wnt signaling pathway
MW:	52.5 kDa
Gene Summary:	Alzheimer's disease (AD) patients with an inherited form of the disease carry mutations in the presenilin proteins (PSEN1; PSEN2) or in the amyloid precursor protein (APP). These disease-linked mutations result in increased production of the longer form of amyloid-beta (main component of amyloid deposits found in AD brains). Presenilins are postulated to regulate APP processing through their effects on gamma-secretase, an enzyme that cleaves APP. Also, it is thought that the presenilins are involved in the cleavage of the Notch receptor, such that they either directly regulate gamma-secretase activity or themselves are protease enzymes. Several alternatively spliced transcript variants encoding different isoforms have been identified for this gene, the full-length nature of only some have been determined. [provided by RefSeq, Aug 2008]

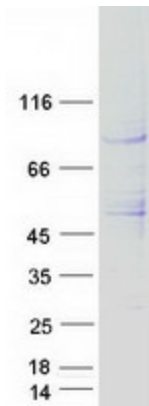
Product images:



Circular map for RC216443



Western blot validation of overexpression lysate (Cat# [LY424973]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216443 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PSEN1 protein (Cat# [TP316443]). The protein was produced from HEK293T cells transfected with PSEN1 cDNA clone (Cat# RC216443) using MegaTran 2.0 (Cat# [TT210002]).