

# Product datasheet for KN216443RB

## Presenilin 1 (PSEN1) Human Gene Knockout Kit (CRISPR)

## **Product data:**

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control
Donor DNA:	RFP-BSD
Symbol:	Presenilin 1
Locus ID:	5663
Components:	<ul> <li>KN216443G1, Presenilin 1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN216443G2, Presenilin 1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</li> <li>KN216443RBD, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.</li> <li>GE100003, scramble sequence in pCas-Guide vector</li> </ul>
Disclaimer:	These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.
RefSeq:	<u>NM 000021, NM 007318, NM 007319</u>
UniProt ID:	<u>P49768</u>
Synonyms:	AD3; FAD; PS-1; PS1; S182
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

View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

by RefSeq, Aug 2008]

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

#### **Product images:**



RFP, Luc, and mBFP will be under native gene promoter

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2025 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US