

Product datasheet for **KN209258BN**

Niemann Pick C1 (NPC1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control
Donor DNA:	mBFP-Neo
Symbol:	Niemann Pick C1
Locus ID:	4864
Components:	<p>KN209258G1, Niemann Pick C1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN209258G2, Niemann Pick C1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN209258BND, donor DNA containing left and right homologous arms and mBFP-Neo functional cassette.</p> <p>GE100003, scramble sequence in pCas-Guide vector</p>
RefSeq:	NM_000271
UniProt ID:	O15118
Synonyms:	NPC
Summary:	<p>This gene encodes a large protein that resides in the limiting membrane of endosomes and lysosomes and mediates intracellular cholesterol trafficking via binding of cholesterol to its N-terminal domain. It is predicted to have a cytoplasmic C-terminus, 13 transmembrane domains, and 3 large loops in the lumen of the endosome - the last loop being at the N-terminus. This protein transports low-density lipoproteins to late endosomal/lysosomal compartments where they are hydrolyzed and released as free cholesterol. Defects in this gene cause Niemann-Pick type C disease, a rare autosomal recessive neurodegenerative disorder characterized by over accumulation of cholesterol and glycosphingolipids in late endosomal/lysosomal compartments.[provided by RefSeq, Aug 2009]</p>



[View online »](#)

Product images:

