

Product datasheet for KN202082BN

OriGene Technologies, Inc.

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alpha 1 Antitrypsin (SERPINA1) 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: alpha 1 Antitrypsin

Locus ID: 5265

Components: KN202082G1, alpha 1 Antitrypsin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN202082G2, alpha 1 Antitrypsin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN202082BND**, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

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: NM 000295, NM 001002235, NM 001002236, NM 001127700, NM 001127701,

NM 001127702, NM 001127703, NM 001127704, NM 001127705, NM 001127706,

NM 001127707

UniProt ID: P01009

Synonyms: A1A; A1AT; AAT; alpha1AT; PI; PI1; PRO2275

Summary: The protein encoded by this gene is a serine protease inhibitor belonging to the serpin

superfamily whose targets include elastase, plasmin, thrombin, trypsin, chymotrypsin, and plasminogen activator. This protein is produced in the liver, the bone marrow, by lymphocytic and monocytic cells in lymphoid tissue, and by the Paneth cells of the gut. Defects in this gene are associated with chronic obstructive pulmonary disease, emphysema, and chronic liver disease. Several transcript variants encoding the same protein have been found for this

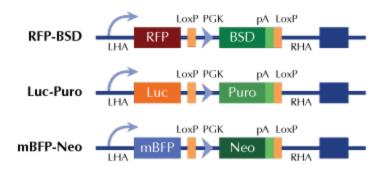
gene. [provided by RefSeq, Aug 2020]





Product images:

Donor Vector Edited Chromosome



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