

Product datasheet for KN200723RB

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

OriGene Technologies, Inc.

EU: info-de@origene.com CN: techsupport@origene.cn

ALDH1A1 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: ALDH1A1

Locus ID: 216

Components: KN200723G1, ALDH1A1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN200723G2, ALDH1A1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) **KN200723RBD**, donor DNA containing left and right homologous arms and RFP-BSD

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: <u>NM 000689</u>

UniProt ID: <u>P00352</u>

Synonyms: ALDC; ALDH-E1; ALDH1; ALDH11; HEL-9; HEL-S-53e; HEL12; PUMB1; RALDH1

Summary: The protein encoded by this gene belongs to the aldehyde dehydrogenase family. Aldehyde

dehydrogenase is the next enzyme after alcohol dehydrogenase in the major pathway of alcohol metabolism. There are two major aldehyde dehydrogenase isozymes in the liver, cytosolic and mitochondrial, which are encoded by distinct genes, and can be distinguished by their electrophoretic mobility, kinetic properties, and subcellular localization. This gene

encodes the cytosolic isozyme. Studies in mice show that through its role in retinol metabolism, this gene may also be involved in the regulation of the metabolic responses to

high-fat diet. [provided by RefSeq, Mar 2011]





Product images:

Donor Vector Edited Chromosome



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