

Product datasheet for KN200210LP

OriGene Technologies, Inc.

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AKR1C3 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro

Symbol: AKR1C3 Locus ID: 8644

Components: KN200210G1, AKR1C3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN200210G2, AKR1C3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN200210LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

RefSeq: <u>NM 001253908, NM 001253909, NM 003739</u>

UniProt ID: P42330

Synonyms: DD3; DDX; HA1753; HAKRB; HAKRe; hluPGFS; HSD17B5; PGFS

Summary: This gene encodes a member of the aldo/keto reductase superfamily, which consists of more

than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF2 to PGD2. It may play an important role in the pathogenesis of allergic

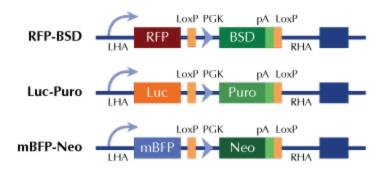
diseases such as asthma, and may also have a role in controlling cell growth and/or

differentiation. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]



Product images:

Donor Vector Edited Chromosome



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