

Product datasheet for KN204839RB

OriGene Technologies, Inc.

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Carbonic Anhydrase IX (CA9) 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: Carbonic Anhydrase IX

Locus ID: 768

Components: KN204839G1, Carbonic Anhydrase IX gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN204839G2, Carbonic Anhydrase IX gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN204839RBD, 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 001216</u>

UniProt ID: Q16790

Synonyms: CAIX; MN

Summary: Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes that catalyze the

reversible hydration of carbon dioxide. They participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. They show extensive diversity in tissue distribution and in their subcellular localization. CA IX is a transmembrane protein and is one of only two tumor-associated carbonic anhydrase isoenzymes known. It is expressed in all clear-cell renal cell carcinoma, but is not detected in normal kidney or most other normal tissues. It may be involved in cell proliferation and transformation. This gene was mapped to 17q21.2 by fluorescence in situ hybridization, however, radiation hybrid mapping localized it

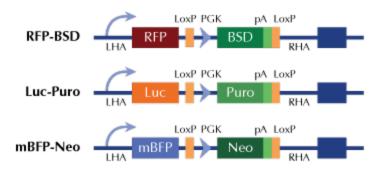
to 9p13-p12. [provided by RefSeg, Jun 2014]





Product images:

Donor Vector Edited Chromosome



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