

Product datasheet for KN219922LP

OriGene Technologies, Inc.

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

EMA (MUC1) 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: EMA Locus ID: 4582

Components: KN219922G1, EMA gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence:

CCCTGCTTAGGTGGTCTTCG

KN219922G2, EMA gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence:

CTGCTCCTCACAGTGCTTAC

KN219922LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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 001018016, NM 001018017, NM 001018021, NM 001044390, NM 001044391,

NM 001044392, NM 001044393, NM 001204285, NM 001204286, NM 001204287, NM 001204288, NM 001204289, NM 001204290, NM 001204291, NM 001204292, NM 001204293, NM 001204294, NM 001204295, NM 001204296, NM 001204297,

NM 002456, NM 182741

UniProt ID: P15941

Synonyms: ADMCKD; ADMCKD1; CA 15-3; CD227; EMA; H23AG; KL-6; MAM6; MCD; MCKD; MCKD1; MUC-

1; MUC-1/SEC



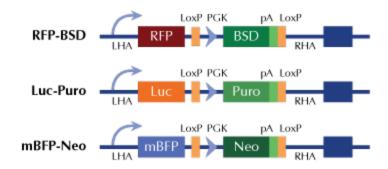


Summary:

This gene encodes a membrane-bound protein that is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Feb 2011]

Product images:

Donor Vector Edited Chromosome



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