

Product datasheet for KN208677LP

OriGene Technologies, Inc.

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TMPRSS2 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: TMPRSS2

Locus ID: 7113

Components: KN208677G1, TMPRSS2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN208677G2, TMPRSS2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN208677LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

RefSeq: <u>NM 001135099</u>, <u>NM 005656</u>

UniProt ID: <u>015393</u>

Synonyms: PP9284; PRSS10

Summary: This gene encodes a protein that belongs to the serine protease family. The encoded protein

contains a type II transmembrane domain, a receptor class A domain, a scavenger receptor cysteine-rich domain and a protease domain. Serine proteases are known to be involved in many physiological and pathological processes. This gene was demonstrated to be upregulated by androgenic hormones in prostate cancer cells and down-regulated in androgen-independent prostate cancer tissue. The protease domain of this protein is thought to be cleaved and secreted into cell media after autocleavage. This protein also facilitates entry of viruses into host cells by proteolytically cleaving and activating viral envelope glycoproteins. Viruses found to use this protein for cell entry include Influenza virus and the human

coronaviruses HCoV-229E, MERS-CoV, SARS-CoV and SARS-CoV-2 (COVID-19 virus).

Alternatively spliced transcript variants encoding different isoforms have been found for this

gene. [provided by RefSeq, Apr 2020]





Product images:

Donor Vector Edited Chromosome



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