

Product datasheet for KN202477LP

OriGene Technologies, Inc.

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TTF1 (NKX2-1) 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: TTF1 Locus ID: 7080

Components: KN202477G1, TTF1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN202477G2, TTF1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN202477LPD, 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: <u>NM 001079668</u>, <u>NM 003317</u>

UniProt ID: P43699

Synonyms: BCH; BHC; NK-2; NKX2.1; NKX2A; TEBP; TITF1; TTF-1; TTF1

Summary: This gene encodes a protein initially identified as a thyroid-specific transcription factor. The

encoded protein binds to the thyroglobulin promoter and regulates the expression of thyroid-specific genes but has also been shown to regulate the expression of genes involved in morphogenesis. Mutations and deletions in this gene are associated with benign hereditary chorea, choreoathetosis, congenital hypothyroidism, and neonatal respiratory distress, and may be associated with thyroid cancer. Multiple transcript variants encoding different isoforms have been found for this gene. This gene shares the symbol/alias 'TTF1' with

another gene, transcription termination factor 1, which plays a role in ribosomal gene

transcription. [provided by RefSeq, Feb 2014]





Product images:

Donor Vector Edited Chromosome



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