

Product datasheet for KN202920BN

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

Twist (TWIST1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo

Symbol: Twist Locus ID: 7291

Components: KN202920G1, Twist gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN202920G2, Twist gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN202920BND, donor DNA containing left and right homologous arms and mBFP-Neo

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 000474, NR 149001</u>

UniProt ID: Q15672

Synonyms: ACS3; bHLHa38; BPES2; BPES3; CRS; CRS1; CSO; SCS; TWIST

Summary: This gene encodes a basic helix-loop-helix (bHLH) transcription factor that plays an important

role in embryonic development. The encoded protein forms both homodimers and heterodimers that bind to DNA E box sequences and regulate the transcription of genes involved in cranial suture closure during skull development. This protein may also regulate

neural tube closure, limb development and brown fat metabolism. This gene is

hypermethylated and overexpressed in multiple human cancers, and the encoded protein promotes tumor cell invasion and metastasis, as well as metastatic recurrence. Mutations in this gene cause Saethre-Chotzen syndrome in human patients, which is characterized by

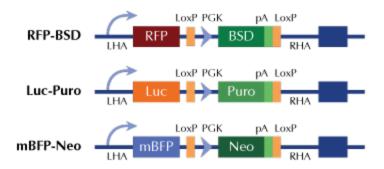
craniosynostosis, ptosis and hypertelorism. [provided by RefSeq, Jul 2020]





Product images:

Donor Vector Edited Chromosome



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