

## Product datasheet for KN216042LP

#### OriGene Technologies, Inc.

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### **BORIS (CTCFL) 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: BORIS Locus ID: 140690

**Components: KN216042G1**, BORIS gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN216042G2, BORIS gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN216042LPD, 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 001269040, NM 001269041, NM 001269042, NM 001269043, NM 001269044,

NM 001269045, NM 001269046, NM 001269047, NM 001269048, NM 001269049, NM 001269050, NM 001269051, NM 001269052, NM 001269054, NM 001269055.

NM 080618, NR 072975

UniProt ID: Q8NI51

Synonyms: BORIS; CT27; CTCF-T; dJ579F20.2; HMGB1L1

**Summary:** CCCTC-binding factor (CTCF), an 11-zinc-finger factor involved in gene regulation, utilizes

different zinc fingers to bind varying DNA target sites. CTCF forms methylation-sensitive insulators that regulate X-chromosome inactivation. This gene is a paralog of CTCF and appears to be expressed primarily in the cytoplasm of spermatocytes, unlike CTCF which is expressed primarily in the nucleus of somatic cells. CTCF and the protein encoded by this gene are normally expressed in a mutually exclusive pattern that correlates with resetting of methylation marks during male germ cell differentiation. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by

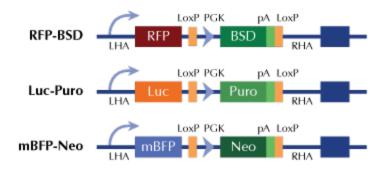
RefSeq, Jun 2012]





# **Product images:**

#### Donor Vector Edited Chromosome



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