

## Product datasheet for KN204803LP

### OriGene Technologies, Inc.

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### Osteopontin (SPP1) 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: Osteopontin

**Locus ID:** 6696

**Components: KN204803G1**, Osteopontin gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN204803G2**, Osteopontin gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN204803LPD, 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 000582, NM 001040058, NM 001040060, NM 001251829, NM 001251830

UniProt ID: <u>P10451</u>

Synonyms: BNSP; BSPI; ETA-1; OPN

**Summary:** The protein encoded by this gene is involved in the attachment of osteoclasts to the

mineralized bone matrix. The encoded protein is secreted and binds hydroxyapatite with high

affinity. The osteoclast vitronectin receptor is found in the cell membrane and may be involved in the binding to this protein. This protein is also a cytokine that upregulates expression of interferon-gamma and interleukin-12. Several transcript variants encoding

different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]



# **Product images:**

### Donor Vector Edited Chromosome



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