

Product datasheet for KN212884BN

RUNX2 Human Gene Knockout Kit (CRISPR)

Product data:

OriGene Technologies, Inc.

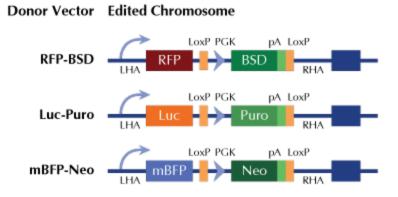
9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

| Product Type: | Knockout Kits (CRISPR) |
|---------------|---|
| Format: | 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control |
| Donor DNA: | mBFP-Neo |
| Symbol: | RUNX2 |
| Locus ID: | 860 |
| Components: | KN212884G1, RUNX2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN212884G2, RUNX2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN212884BND, 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 001015051, NM 001024630, NM 001278478, NM 004348, NR 103532, NR 103533</u> , <u>NM 001369405</u> |
| UniProt ID: | <u>Q13950</u> |
| Synonyms: | AML3; CBF-alpha-1; CBFA1; CCD; CCD1; CLCD; OSF-2; OSF2; PEA2aA; PEBP2aA |
| Summary: | This gene is a member of the RUNX family of transcription factors and encodes a nuclear protein with an Runt DNA-binding domain. This protein is essential for osteoblastic differentiation and skeletal morphogenesis and acts as a scaffold for nucleic acids and regulatory factors involved in skeletal gene expression. The protein can bind DNA both as a monomer or, with more affinity, as a subunit of a heterodimeric complex. Two regions of potential trinucleotide repeat expansions are present in the N-terminal region of the encoded protein, and these and other mutations in this gene have been associated with the bone development disorder cleidocranial dysplasia (CCD). Transcript variants that encode different protein isoforms result from the use of alternate promoters as well as alternate splicing. [provided by RefSeq, Jul 2016] |



This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Product images:



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

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2022 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US