

Product datasheet for KN214963BN

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OriGene Technologies, Inc.

FOXP2 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

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

Symbol: FOXP2 93986 Locus ID:

Components: **KN214963G1**, FOXP2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN214963G2, FOXP2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN214963BND, donor DNA containing left and right homologous arms and 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 001172766, NM 001172767, NM 001172777, NM 014491, NM 148898, NM 148899,

NM 148900, NR 033766, NR 033767

UniProt ID: 015409

Synonyms: CAGH44; SPCH1; TNRC10

Summary: This gene encodes a member of the forkhead/winged-helix (FOX) family of transcription

factors. It is expressed in fetal and adult brain as well as in several other organs such as the

lung and gut. The protein product contains a FOX DNA-binding domain and a large

polyglutamine tract and is an evolutionarily conserved transcription factor, which may bind directly to approximately 300 to 400 gene promoters in the human genome to regulate the expression of a variety of genes. This gene is required for proper development of speech and language regions of the brain during embryogenesis, and may be involved in a variety of biological pathways and cascades that may ultimately influence language development. Mutations in this gene cause speech-language disorder 1 (SPCH1), also known as autosomal dominant speech and language disorder with orofacial dyspraxia. Multiple alternative

transcripts encoding different isoforms have been identified in this gene.[provided by RefSeq,

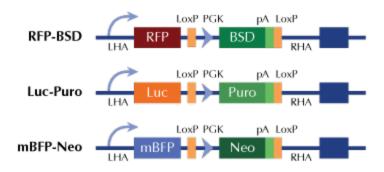
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Product images:

Donor Vector Edited Chromosome



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