

Product datasheet for KN201075LP

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

STAT1 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: STAT1 Locus ID: 6772

Components: KN201075G1, STAT1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target

Sequence: AAAGCTGGTGAACCTGCTCC

KN201075G2, STAT1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target

Sequence: GCAGCTTGACTCAAAATTCC

KN201075LPD, 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.

RefSeg: NM 007315, NM 139266

UniProt ID: P42224

Synonyms: CANDF7; IMD31A; IMD31B; IMD31C; ISGF-3; STAT91

Summary: The protein encoded by this gene is a member of the STAT protein family. In response to

cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. The protein encoded by this gene can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. The protein plays an

important role in immune responses to viral, fungal and mycobacterial pathogens. Mutations in this gene are associated with Immunodeficiency 31B, 31A, and 31C. [provided by RefSeq,

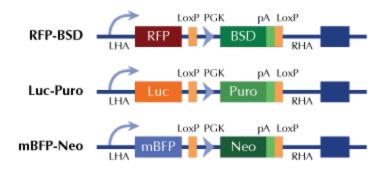
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Product images:

Donor Vector Edited Chromosome



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