

Product datasheet for KN315238LP

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

S100a4 Mouse 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:
 \$100a4

 Locus ID:
 20198

Components: KN315238G1, S100a4 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN315238G2, S100a4 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN315238LPD, 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 011311

 UniProt ID:
 P07091

Synonyms: 18A2; 42a; Capl; FSp1; metastasin; Mts1; PeL98; pk9a

Summary: Calcium-binding protein that plays a role in various cellular processes including motility,

angiogenesis, cell differentiation, apoptosis, and autophagy (PubMed:20519440). Increases cell motility and invasiveness by interacting with non-muscle myosin heavy chain (NMMHC) IIA/MYH9 (PubMed:8051043). Mechanistically, promotes filament depolymerization and increases the amount of soluble myosin-IIA, resulting in the formation of stable protrusions facilitating chemotaxis (PubMed:8051043). Modulates also the pro-apoptotic function of TP53

by binding to its C-terminal transactivation domain within the nucleus and reducing its protein levels (By similarity). Within the extracellular space, stimulates cytokine production including grounds at a selection of the standard of the

including granulocyte colony-stimulating factor and CCL24 from T-lymphocytes (PubMed:20103644). In addition, stimulates T-lymphocyte chemotaxis by acting as a chemoattractant complex with PGLYRP1 that promotes lymphocyte migration via CCR5 and

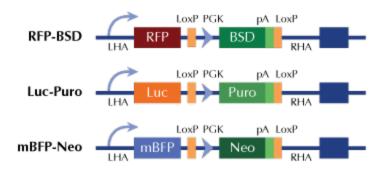
CXCR3 receptors (By similarity).[UniProtKB/Swiss-Prot Function]





Product images:

Donor Vector Edited Chromosome



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