

## Product datasheet for KN316272RB

### Froduct datasireet for kins 102/2kt

# **Smad3 Mouse Gene Knockout Kit (CRISPR)**

**Product data:** 

**Product Type:** Knockout Kits (CRISPR)

**Format:** 2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control

Donor DNA:RFP-BSDSymbol:Smad3Locus ID:17127

**Components:** KN316272G1, Smad3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

**KN316272G2**, Smad3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN316272RBD, donor DNA containing left and right homologous arms and RFP-BSD

functional cassette.

**GE100003**, scramble sequence in pCas-Guide vector

 RefSeq:
 NM 016769

 UniProt ID:
 Q8BUN5

Synonyms: AU022421; Madh3

Summary: Receptor-regulated SMAD (R-SMAD) that is an intracellular signal transducer and

transcriptional modulator activated by TGF-beta (transforming growth factor) and activin type 1 receptor kinases. Binds the TRE element in the promoter region of many genes that are

regulated by TGF-beta and, on formation of the SMAD3/SMAD4 complex, activates

transcription. Also can form a SMAD3/SMAD4/JUN/FOS complex at the AP-1/SMAD site to regulate TGF-beta-mediated transcription. Has an inhibitory effect on wound healing probably by modulating both growth and migration of primary keratinocytes and by altering the TGF-mediated chemotaxis of monocytes. This effect on wound healing appears to be hormone-sensitive. Regulator of chondrogenesis and osteogenesis and inhibits early healing of bone fractures. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator (By similarity).[UniProtKB/Swiss-

Prot Function]



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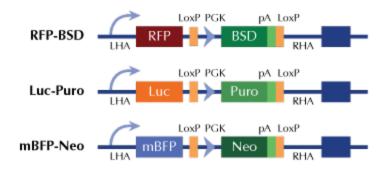
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## **Product images:**

#### Donor Vector Edited Chromosome



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