

Product datasheet for **KN316272RB**

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-BSD
Symbol:	Smad3
Locus ID:	17127
Components:	<p>KN316272G1, Smad3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN316272G2, Smad3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN316272RBD, donor DNA containing left and right homologous arms and RFP-BSD functional cassette.</p> <p>GE100003, scramble sequence in pCas-Guide vector</p>
RefSeq:	NM_016769
UniProt ID:	Q8BUN5
Synonyms:	AU022421; Madh3
Summary:	<p>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]</p>



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Product images:

