

Product datasheet for **KN210866BN**

SMURF 2 (SMURF2) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control
Donor DNA:	mBFP-Neo
Symbol:	SMURF 2
Locus ID:	64750
Components:	<p>KN210866G1, SMURF 2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN210866G2, SMURF 2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN210866BND, donor DNA containing left and right homologous arms and mBFP-Neo functional cassette.</p> <p>GE100003, scramble sequence in pCas-Guide vector</p>
RefSeq:	NM_022739
UniProt ID:	Q9HAU4
Synonyms:	DKFZp686F0270; MGC138150
Summary:	<p>E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. Interacts with SMAD1 and SMAD7 in order to trigger their ubiquitination and proteasome-dependent degradation. In addition, interaction with SMAD7 activates autocatalytic degradation, which is prevented by interaction with SCYE1. Forms a stable complex with the TGF-beta receptor-mediated phosphorylated SMAD2 and SMAD3. In this way, SMAD2 may recruit substrates, such as SNON, for ubiquitin-mediated degradation. Enhances the inhibitory activity of SMAD7 and reduces the transcriptional activity of SMAD2. Coexpression of SMURF2 with SMAD1 results in considerable decrease in steady-state level of SMAD1 protein and a smaller decrease of SMAD2 level.[UniProtKB/Swiss-Prot Function]</p>



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Product images:

