

Product datasheet for **KN201561BN**

GALE 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:	GALE
Locus ID:	2582
Components:	<p>KN201561G1, GALE gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN201561G2, GALE gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)</p> <p>KN201561BND, 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_000403 , NM_001008216 , NM_001127621
UniProt ID:	Q14376
Synonyms:	SDR1E1
Summary:	<p>This gene encodes UDP-galactose-4-epimerase which catalyzes two distinct but analogous reactions: the epimerization of UDP-glucose to UDP-galactose, and the epimerization of UDP-N-acetylglucosamine to UDP-N-acetylgalactosamine. The bifunctional nature of the enzyme has the important metabolic consequence that mutant cells (or individuals) are dependent not only on exogenous galactose, but also on exogenous N-acetylgalactosamine as a necessary precursor for the synthesis of glycoproteins and glycolipids. Mutations in this gene result in epimerase-deficiency galactosemia, also referred to as galactosemia type 3, a disease characterized by liver damage, early-onset cataracts, deafness and cognitive disability, with symptoms ranging from mild ('peripheral' form) to severe ('generalized' form). Multiple alternatively spliced transcripts encoding the same protein have been identified. [provided by RefSeq, Jul 2008]</p>



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Product images:

