

Product datasheet for **KN200368**

eIF2 alpha (EIF2S1) Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	eIF2 alpha
Locus ID:	1965
Components:	KN200368G1 , eIF2 alpha gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TAAAATCTACAACCTTAGACC KN200368G2 , eIF2 alpha gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCAGATCCATTGCTGAAAT KN200368D , donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 CAGGCATCGT GGTGTCACGC TCGTCGTTG GTATGGCTTC ATTCAGCTCC GGTTCCTAAC GATC

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_004094](#)

UniProt ID:

[P05198](#)

Synonyms:

EIF-2; EIF-2A; EIF-2alpha; EIF2; EIF2A

Summary:

The translation initiation factor EIF2 catalyzes the first regulated step of protein synthesis initiation, promoting the binding of the initiator tRNA to 40S ribosomal subunits. Binding occurs as a ternary complex of methionyl-tRNA, EIF2, and GTP. EIF2 is composed of 3 nonidentical subunits, the 36-kD EIF2-alpha subunit (EIF2S1), the 38-kD EIF2-beta subunit (EIF2S2; MIM 603908), and the 52-kD EIF2-gamma subunit (EIF2S3; MIM 300161). The rate of formation of the ternary complex is modulated by the phosphorylation state of EIF2-alpha (Ernst et al., 1987 [PubMed 2948954]).[supplied by OMIM, Feb 2010]

Product images:

