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Product datasheet for KN211740

PDGF Receptor alpha (PDGFRA) 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: PDGF Receptor alpha

Locus ID: 5156

Components: **KN211740G1**, PDGF Receptor alpha gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GACTTCCCATCCGGCGTTCC
KN211740G2, PDGF Receptor alpha gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTCTTAGGCTGTCTTCTCAC
KN211740D, 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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TACAGGCATC GTGGTGTCAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

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.

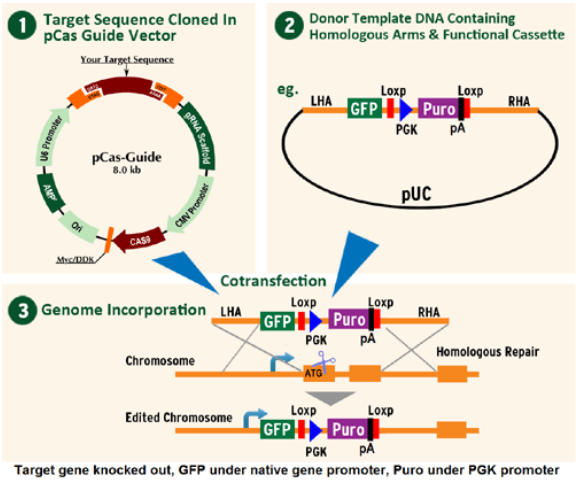
RefSeq: NM_006206, NM_001347827, NM_001347828, NM_001347829, NM_001347830

UniProt ID: P16234

Synonyms: CD140A; PDGFR-2; PDGFR2; RHEPDGFRA

Summary: This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer or a heterodimer, composed of both platelet-derived growth factor receptor alpha and beta polypeptides. Studies suggest that this gene plays a role in organ development, wound healing, and tumor progression. Mutations in this gene have been associated with idiopathic hypereosinophilic syndrome, somatic and familial gastrointestinal stromal tumors, and a variety of other cancers. [provided by RefSeq, Mar 2012]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter