

Product datasheet for **KN213112**

PI 3 Kinase catalytic subunit alpha (PIK3CA) 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:	PI 3 Kinase catalytic subunit alpha
Locus ID:	5290
Components:	<p>KN213112G1, PI 3 Kinase catalytic subunit alpha gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGTTCACCTGATGATGGTCCG</p> <p>KN213112G2, PI 3 Kinase catalytic subunit alpha gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGATTCTTGGGGGCATCAAG</p> <p>KN213112D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

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

```

CCATAAAATT TCTCATTATT ACAGGTTGAG GGCAGGGAGT GAAAAAGGAA AAGGATTTGA CTTCTCTAGG
CATGGTTTTA CTTATTTTAA AATAAGAGCA GTGGACCCAT GATCTGAAAG ATTGTTTCTG GCCTAAATTC
TGTTTTCCG TAAGATAGAA GAGAATGATA AAGGTGATAT GCAATGGGAA TTTTGGGTTG AATTGCAACT
TACTTTTCAT TCTTCCATA GCCTCATCTC TGTCTTGATG AAACCTTAGA GAATCCACTC AAATATAGTG
TTTTCTTAAA TGACTTTTATT AAATTTAATT AAATACAAAT GGTTTTTCTA ATCTCTGCTG AAATAAATTC
TTTGTAGCCT AATTTAGAGC AACAGTCTAG ATTAGAATAC TTAAGATGAA TTACTACTAC TTAGCCTAAT
CAAGTCAAAC TATGAAAAT GAGTTTTTAC ATTTTAGCAG TGTTATAAAT GTATTCTTCT GTAGTTGTGT
CTCTTTTAAAC ATATGTTTTT CTTCTTTGAT TTAGTTTCT GCTTTGGGAC AACCATACAT CTAATTCCTT
AAAGTAGTTT TATATGTAAG ACTTGCAAAG AATCAGAACA TAGTAGAATG TTTACTACCA AATGGAATGA
TAGTGACTTT AGAATGCCTC CGTGAGGCTA CATTATAAC CATAAAGCAT GAACTATTTA AAGAAGCAAG
AAAATACCCC CTCCATCAAC TTCTTCAAGA TGAATCTTCT TACATTTTCG TAAGTGTTC TCAAGAAGCA
GAAAGGGAAG AATTTTTTGA TGAACAAGA CGACTTTGTG ACCTTCGGCT TTTTCAACCC TTTTAAAAG
TAATTGAACC AGTAGGCAAC CGTGAAGAAA AGATCCTCAA TCGAGAAATT GGTATGATAC AATATCCTAT
TCTAAAATGC AAATAACCAT AAAGCTTAAAC TGTGTCCCT TTCTAAAATA TTTCTGTCTA AACCAATACC
TTCGTAATCT TAAATAGCTT TCTAAATAAA AATCATAAAT CTAAAGTATG TTTTACTATC GAACTATGGA
ACTATTTTAA ACACCTTGAT ATTATTCCAT AAGGTTTTAT TTAAGAAATG TCATTTGTGG GATGACTTAG
ATTTGTTATA TCTCAGTGTG GTTATTCTTT TAAAAATGAT TGATAGGAAT GTTTGTCTGC TTTGCTCTAA
ATTGCTGAAT

```

GE100003, scramble sequence in pCas-Guide vector



[View online »](#)

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_006218](#)

UniProt ID: [P42336](#)

Synonyms: CLOVE; CWS5; MCAP; MCM; MCMTC; p110-alpha; PI3K; PI3K-alpha

Summary: Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. A pseudogene of this gene has been defined on chromosome 22. [provided by RefSeq, Apr 2016]

Product images:

