

Product datasheet for TR310475

OriGene Technologies, Inc.

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Pepsinogen II (PGC) Human shRNA Plasmid Kit (Locus ID 5225)

Product data:

Product Type: shRNA Plasmids

Product Name: Pepsinogen II (PGC) Human shRNA Plasmid Kit (Locus ID 5225)

Locus ID: 5225

Synonyms: PEPC; PGII

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

Components: PGC - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

5225). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001166424, NM 002630, NM 002630.1, NM 002630.2, NM 002630.3, NM 001166424.1,

BC073740, BC073740.1, BC042578, NM 002630.4

UniProt ID: P20142

Summary: This gene encodes an aspartic proteinase that belongs to the peptidase family A1. The

encoded protein is a digestive enzyme that is produced in the stomach and constitutes a major component of the gastric mucosa. This protein is also secreted into the serum. This protein is synthesized as an inactive zymogen that includes a highly basic prosegment. This enzyme is converted into its active mature form at low pH by sequential cleavage of the prosegment that is carried out by the enzyme itself. Polymorphisms in this gene are associated with susceptibility to gastric cancers. Serum levels of this enzyme are used as a biomarker for certain gastric diseases including Helicobacter pylori related gastritis. Alternate splicing results in multiple transcript variants. A pseudogene of this gene is found on

chromosome 1. [provided by RefSeq, Oct 2009]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.





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Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).