

### **Product datasheet for TR314314**

#### OriGene Technologies, Inc.

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## Complement C4A (C4A) Human shRNA Plasmid Kit (Locus ID 720)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Complement C4A (C4A) Human shRNA Plasmid Kit (Locus ID 720)

Locus ID: 720

Synonyms: C4; C4A2; C4A3; C4A4; C4A6; C4AD; C4S; CO4; CPAMD2; RG

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

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Format: Retroviral plasmids

Components: C4A - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 720).

5µg purified plasmid DNA per construct

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

**RefSeq:** <u>NM 001252204, NM 007293, NM 007293.1, NM 007293.2, NM 001252204.1, BC063289,</u>

BC012372, BC016933, BC144546, BC146673, BC146849, BC151204, BC171786, NM 007293.3

UniProt ID: POCOL4

Summary: This gene encodes the acidic form of complement factor 4, part of the classical activation

pathway. The protein is expressed as a single chain precursor which is proteolytically cleaved into a trimer of alpha, beta, and gamma chains prior to secretion. The trimer provides a surface for interaction between the antigen-antibody complex and other complement components. The alpha chain is cleaved to release C4 anaphylatoxin, an antimicrobial peptide

and a mediator of local inflammation. Deficiency of this protein is associated with systemic

lupus erythematosus and type I diabetes mellitus. This gene localizes to the major

histocompatibility complex (MHC) class III region on chromosome 6. Varying haplotypes of this gene cluster exist, such that individuals may have 1, 2, or 3 copies of this gene. Two transcript variants encoding different isoforms have been found for this gene. [provided by

RefSeq, Nov 2014]

**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).