

## Product datasheet for **TR313068**

### FANCD2 Human shRNA Plasmid Kit (Locus ID 2177)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	FANCD2 Human shRNA Plasmid Kit (Locus ID 2177)
Locus ID:	2177
Synonyms:	FA-D2; FA4; FACD; FAD; FAD2; FANCD
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	FANCD2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2177). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001018115</a> , <a href="#">NM_001319984</a> , <a href="#">NM_033084</a> , <a href="#">NM_033084.1</a> , <a href="#">NM_033084.2</a> , <a href="#">NM_033084.3</a> , <a href="#">NM_033084.4</a> , <a href="#">NM_001018115.1</a> , <a href="#">NM_001018115.2</a> , <a href="#">BC013582</a> , <a href="#">BC038666</a> , <a href="#">BC156799</a> , <a href="#">NM_033084.6</a> , <a href="#">NM_001018115.3</a>
UniProt ID:	<a href="#">Q9BXW9</a>
Summary:	The Fanconi anemia complementation group (FANC) currently includes FANCA, FANCB, FANCC, FANCD1 (also called BRCA2), FANCD2, FANCE, FANCF, FANCG, FANCI, FANCJ (also called BRIP1), FANCL, FANCM and FANCN (also called PALB2). The previously defined group FANCH is the same as FANCA. Fanconi anemia is a genetically heterogeneous recessive disorder characterized by cytogenetic instability, hypersensitivity to DNA crosslinking agents, increased chromosomal breakage, and defective DNA repair. The members of the Fanconi anemia complementation group do not share sequence similarity; they are related by their assembly into a common nuclear protein complex. This gene encodes the protein for complementation group D2. This protein is monoubiquitinated in response to DNA damage, resulting in its localization to nuclear foci with other proteins (BRCA1 AND BRCA2) involved in homology-directed DNA repair. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2016]



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**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 [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).

**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](mailto: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).