

## **Product datasheet for TR313114**

#### OriGene Technologies, Inc.

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## Factor VII (F7) Human shRNA Plasmid Kit (Locus ID 2155)

### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** Factor VII (F7) Human shRNA Plasmid Kit (Locus ID 2155)

Locus ID: 2155 Synonyms: SPCA

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

**Components:** F7 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2155).

5µg purified plasmid DNA per construct

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

**RefSeq:** <u>NM 000131</u>, <u>NM 001267554</u>, <u>NM 019616</u>, <u>NR 051961</u>, <u>NM 019616.1</u>, <u>NM 019616.2</u>,

NM 019616.3, NM 000131.1, NM 000131.2, NM 000131.3, NM 000131.4, NM 001267554.1,

BC130468, NM 019616.4

UniProt ID: P08709

Summary: This gene encodes coagulation factor VII which is a vitamin K-dependent factor essential for

hemostasis. This factor circulates in the blood in a zymogen form, and is converted to an active form by either factor IXa, factor Xa, factor XIIa, or thrombin by minor proteolysis. Upon activation of the factor VII, a heavy chain containing a catalytic domain and a light chain containing 2 EGF-like domains are generated, and two chains are held together by a disulfide bond. In the presence of factor III and calcium ions, the activated factor then further activates the coagulation cascade by converting factor IX to factor IXa and/or factor X to factor Xa. Defects in this gene can cause coagulopathy. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing to

generate mature polypeptides. [provided by RefSeq, Aug 2015]

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>.







# 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).