

## Product datasheet for **TR304824**

### EFS Human shRNA Plasmid Kit (Locus ID 10278)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	EFS Human shRNA Plasmid Kit (Locus ID 10278)
Locus ID:	10278
Synonyms:	CAS3; CASS3; EFS1; EFS2; HEFS; SIN
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	EFS - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 10278). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001277174</a> , <a href="#">NM_005864</a> , <a href="#">NM_032459</a> , <a href="#">NM_032459.1</a> , <a href="#">NM_032459.2</a> , <a href="#">NM_005864.1</a> , <a href="#">NM_005864.2</a> , <a href="#">NM_005864.3</a> , <a href="#">NM_001277174.1</a> , <a href="#">BC034246</a> , <a href="#">BC034246.1</a> , <a href="#">BC046403</a> , <a href="#">NM_032459.3</a> , <a href="#">NM_005864.4</a>
UniProt ID:	<a href="#">O43281</a>
Summary:	The protein encoded by this gene is a member of the CAS (CRK-associated substrate) family of adaptor proteins which typically serve as scaffolds for the assembly of larger signaling complexes. These complexes form at the cell surface where integrin binding leads to the subsequent phosphorylation of a CAS protein. Additional binding of SRC family kinases leads to CAS hyperphosphorylation and the creation of binding sites for CRK and other proteins that cause actin cytoskeleton reorganization. This gene plays a role in integrin-mediated cell attachment, spreading, and migration and also plays a role in both normal and malignant cellular transformation. This broadly expressed gene has been shown to play a role in neurite outgrowth and its expression in the thymus and lymphocytes is important for T cell maturation and the development of immunological self-tolerance. Alternative splicing of this gene results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jul 2020]


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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).