

## Product datasheet for **TR305715**

### Prune homolog 2 (PRUNE2) Human shRNA Plasmid Kit (Locus ID 158471)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Prune homolog 2 (PRUNE2) Human shRNA Plasmid Kit (Locus ID 158471)
Locus ID:	158471
Synonyms:	BMCC1; BNIPXL; C9orf65; KIAA0367
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	PRUNE2 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 158471). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001308047</a> , <a href="#">NM_001308048</a> , <a href="#">NM_001308049</a> , <a href="#">NM_001308050</a> , <a href="#">NM_001308051</a> , <a href="#">NM_001330680</a> , <a href="#">NM_015225</a> , <a href="#">NM_138818</a> , <a href="#">NR_131751</a> , <a href="#">NM_138818.1</a> , <a href="#">NM_138818.2</a> , <a href="#">NM_015225.2</a> , <a href="#">BC019095</a> , <a href="#">BC022571</a> , <a href="#">BC150641</a> , <a href="#">NM_015225.3</a>
UniProt ID:	<a href="#">Q8WUY3</a>
Summary:	The protein encoded by this gene belongs to the B-cell CLL/lymphoma 2 and adenovirus E1B 19 kDa interacting family, whose members play roles in many cellular processes including apoptosis, cell transformation, and synaptic function. Several functions for this protein have been demonstrated including suppression of Ras homolog family member A activity, which results in reduced stress fiber formation and suppression of oncogenic cellular transformation. A high molecular weight isoform of this protein has also been shown to colocalize with Adaptor protein complex 2, beta-Adaptin and endodermal markers, suggesting an involvement in post-endocytic trafficking. In prostate cancer cells, this gene acts as a tumor suppressor and its expression is regulated by prostate cancer antigen 3, a non-protein coding gene on the opposite DNA strand in an intron of this gene. Prostate cancer antigen 3 regulates levels of this gene through formation of a double-stranded RNA that undergoes adenosine deaminase actin on RNA-dependent adenosine-to-inosine RNA editing. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2015]



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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).