

Product datasheet for **TR306773**

AKNA Human shRNA Plasmid Kit (Locus ID 80709)

Product data:

Product Type:	shRNA Plasmids
Product Name:	AKNA Human shRNA Plasmid Kit (Locus ID 80709)
Locus ID:	80709
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	AKNA - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 80709). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001317950 , NM_001317952 , NM_030767 , NM_030767.1 , NM_030767.2 , NM_030767.3 , NM_030767.4 , NM_030767.5 , BC055285 , BC055285.1 , BC042202
UniProt ID:	Q7Z591
Summary:	Centrosomal protein that plays a key role in cell delamination by regulating microtubule organization (By similarity). Required for the delamination and retention of neural stem cells from the subventricular zone during neurogenesis (By similarity). Also regulates the epithelial-to-mesenchymal transition in other epithelial cells (By similarity). Acts by increasing centrosomal microtubule nucleation and recruiting nucleation factors and minus-end stabilizers, thereby destabilizing microtubules at the adherens junctions and mediating constriction of the apical endfoot (By similarity). In addition, may also act as a transcription factor that specifically activates the expression of the CD40 receptor and its ligand CD40L/CD154, two cell surface molecules on lymphocytes that are critical for antigen-dependent-B-cell development (PubMed:11268217). Binds to A/T-rich promoters (PubMed:11268217). It is unclear how it can both act as a microtubule organizer and as a transcription factor; additional evidences are required to reconcile these two apparently contradictory functions (Probable).[UniProtKB/Swiss-Prot Function]
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 . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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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).