

Product datasheet for **TL313425**

DNAJB14 Human shRNA Plasmid Kit (Locus ID 79982)

Product data:

Product Type:	shRNA Plasmids
Locus ID:	79982
Synonyms:	EGNR9427; PRO34683
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	DNAJB14 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector (Gene ID = 79982). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<u>NM_001031723</u> , <u>NM_001278310</u> , <u>NM_001278311</u> , <u>NM_024920</u> , <u>NM_001031723.1</u> , <u>NM_001031723.2</u> , <u>NM_001031723.3</u> , <u>NM_024920.1</u> , <u>NM_024920.2</u> , <u>NM_024920.3</u> , <u>NM_001278311.1</u> , <u>NM_001278310.1</u> , <u>BC022248</u> , <u>BC022248.1</u> , <u>NM_001278311.2</u> , <u>NM_001278310.2</u> , <u>NM_001031723.4</u>
UniProt ID:	<u>Q8TBM8</u>



Summary:

Acts as a co-chaperone with HSPA8/Hsc70; required to promote protein folding and trafficking, prevent aggregation of client proteins, and promote unfolded proteins to endoplasmic reticulum-associated degradation (ERAD) pathway (PubMed:24732912). Acts by determining HSPA8/Hsc70's ATPase and polypeptide-binding activities (PubMed:24732912). Can also act independently of HSPA8/Hsc70: together with DNAJB12, acts as a chaperone that promotes maturation of potassium channels KCND2 and KCNH2 by stabilizing nascent channel subunits and assembling them into tetramers (PubMed:27916661). While stabilization of nascent channel proteins is dependent on HSPA8/Hsc70, the process of oligomerization of channel subunits is independent of HSPA8/Hsc70 (PubMed:27916661). When overexpressed, forms membranous structures together with DNAJB12 and HSPA8/Hsc70 within the nucleus; the role of these structures, named DJANGOs, is still unclear (PubMed:24732912).
[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](#).

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).