

# Product datasheet for TL308462

## USP20 Human shRNA Plasmid Kit (Locus ID 10868)

## **Product data:**

### OriGene Technologies, Inc.

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| Product Type:                | shRNA Plasmids   |
|------------------------------|--|
| Product Name:                | USP20 Human shRNA Plasmid Kit (Locus ID 10868)   |
| Locus ID:                    | 10868  |
| Synonyms:                    | hVDU2; LSFR3A; VDU2  |
| Vector:                      | pGFP-C-shLenti (TR30023)   |
| E. coli Selection:           | Chloramphenicol (34 ug/ml)   |
| Mammalian Cell<br>Selection: | Puromycin  |
| Format:                      | Lentiviral plasmids  |
| Components:                  | USP20 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 10868).<br>5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.   |
| RefSeq:                      | NM 001008563, NM 001110303, NM 006676, NM 006676.1, NM 006676.2, NM 006676.3,<br>NM 006676.4, NM 006676.5, NM 006676.6, NM 006676.7, NM 001008563.1,<br>NM 001008563.2, NM 001008563.3, NM 001008563.4, NM 001110303.1, NM 001110303.2,<br>NM 001110303.3, BC039593, BC033669, BM678735, NM 001110303.4  |
| UniProt ID:                  | <u>Q9Y2K6</u>  |
| Summary:                     | This gene encodes a ubiquitin specific processing protease that was first identified as a substrate of the VHL (von Hippel-Lindau disease) protein E3 ubiquitin ligase complex. In addition to being ubiquitinated by the VHL-E3 ligase complex, this enzyme deubiquitinates hypoxia-inducible factor (HIF)-1 alpha and thereby causes increased expression of HIF-1alpha targeted genes which play a role in angiogenesis, glucose metabolism, cell proliferation and metastasis. The enzyme encoded by this gene also regulates G-protein coupled receptor signaling by mediating the deubiquitination of beta-2 adrenergic receptor (ADRB2). This enzyme is a ubiquitously expressed thiolester hydrolase. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq, Jan 2013] |
| 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> .<br>If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u> .   |



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### **GRIGENE** USP20 Human shRNA Plasmid Kit (Locus ID 10868) – TL308462

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).

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