

## Product datasheet for **SR501262**

### Usp10 Rat siRNA Oligo Duplex (Locus ID 307905)

#### Product data:

|                     |   |
|---------------------|---|
| Product Type:       | siRNA Oligo Duplexes  |
| Purity:             | HPLC purified   |
| Quality Control:    | Tested by ESI-MS  |
| Sequences:          | Available with shipment   |
| Stability:          | One year from date of shipment when stored at -20°C.  |
| # of transfections: | Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final conc. 10 nM).  |
| Note:               | Single siRNA duplex (10nmol) can be ordered.  |
| RefSeq:             | <a href="#">NM_001034146</a>  |
| UniProt ID:         | <a href="#">Q3KR59</a>  |
| Synonyms:           | MGC124997   |
| Components:         | Usp10 (Rat) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 307905)<br>Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol<br>Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml  |
| Summary:            | Hydrolase that can remove conjugated ubiquitin from target proteins such as p53/TP53, BECN1, SNX3 and CFTR. Acts as an essential regulator of p53/TP53 stability: in unstressed cells, specifically deubiquitinates p53/TP53 in the cytoplasm, leading to counteract MDM2 action and stabilize p53/TP53. Following DNA damage, translocates to the nucleus and deubiquitinates p53/TP53, leading to regulate the p53/TP53-dependent DNA damage response. Component of a regulatory loop that controls autophagy and p53/TP53 levels: mediates deubiquitination of BECN1, a key regulator of autophagy, leading to stabilize the PIK3C3/VPS34-containing complexes. In turn, PIK3C3/VPS34-containing complexes regulate USP10 stability, suggesting the existence of a regulatory system by which PIK3C3/VPS34-containing complexes regulate p53/TP53 protein levels via USP10 and USP13. Does not deubiquitinate MDM2. Deubiquitinates CFTR in early endosomes, enhancing its endocytic recycling. Involved in a TANK-dependent negative feedback response to attenuate NF-kappaB activation via deubiquitinating IKBKG or TRAF6 in response to interleukin-1-beta (IL1B) stimulation or upon DNA damage. Deubiquitinates TBX21 leading to its stabilization. [UniProtKB/Swiss-Prot Function] |



[View online »](#)

**Performance  
Guaranteed:**

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, 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 siRNA control (quantitative RT-PCR data required).