

## **Product datasheet for TL313160V**

#### OriGene Technologies, Inc.

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### Separase (ESPL1) Human shRNA Lentiviral Particle (Locus ID 9700)

**Product data:** 

**Product Type:** shRNA Lentiviral Particles

**Product Name:** Separase (ESPL1) Human shRNA Lentiviral Particle (Locus ID 9700)

**Locus ID:** 9700

Synonyms: ESP1; SEPA

**Vector:** pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

**Components:** ESPL1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 012291, NM 012291.1, NM 012291.2, NM 012291.3, NM 012291.4, BC047603, BC172238,

BC172570, NM 012291.5

UniProt ID: Q14674

**Summary:** Stable cohesion between sister chromatids before anaphase and their timely separation

during anaphase are critical for chromosome inheritance. In vertebrates, sister chromatid

cohesion is released in 2 steps via distinct mechanisms. The first step involves

phosphorylation of STAG1 (MIM 604358) or STAG2 (MIM 300826) in the cohesin complex. The second step involves cleavage of the cohesin subunit SCC1 (RAD21; MIM 606462) by ESPL1, or separase, which initiates the final separation of sister chromatids (Sun et al., 2009 [PubMed

19345191]).[supplied by OMIM, Nov 2010]

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>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



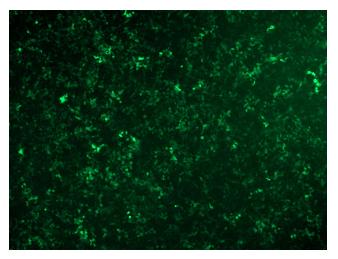


#### Performance Guaranteed:

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.

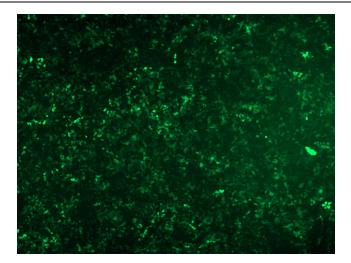
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).

# **Product images:**

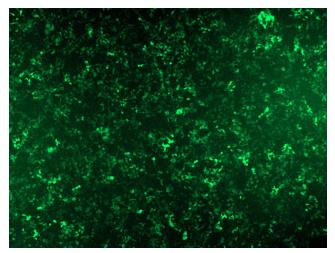


GFP signal was observed under microscope at 48 hours after transduction of TL313160A virus into HEK293 cells. TL313160A virus was prepared using lenti-shRNA TL313160A and [TR30037] packaging kit.





GFP signal was observed under microscope at 48 hours after transduction of TL313160B virus into HEK293 cells. TL313160B virus was prepared using lenti-shRNA TL313160B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL313160D] virus into HEK293 cells. [TL313160D] virus was prepared using lenti-shRNA [TL313160D] and [TR30037] packaging kit.