

## **Product datasheet for TL500458**

## **Ctsc Mouse shRNA Plasmid (Locus ID 13032)**

## **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** Ctsc Mouse shRNA Plasmid (Locus ID 13032)

**Locus ID:** 13032

Synonyms: Al047818; CatC; D; DPP1; DPP1

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

E. coli Selection: Chloramphenicol (34 ug/ml)

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: Ctsc - Mouse, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 13032). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: <u>BC067063, NM 009982, NM 009982.1, NM 009982.2, NM 009982.3, NM 009982.4,</u>

NM 009982.5

UniProt ID: P97821

**Summary:** This gene encodes a member of the peptidase C1 (papain) family of cysteine proteases.

Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate multiple protein products. These products include the dipeptidyl peptidase 1 light, heavy, and exclusion domain chains, which together comprise one subunit of the homotetrameric enzyme. This enzyme has amino dipeptidase activity and may play a role in the activation of granzymes during inflammation.

Homozygous knockout mice for this gene exhibit impaired granzyme activation and

enhanced survival in a sepsis model. [provided by RefSeq, Aug 2015]

**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>.



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## 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).