

## **Product datasheet for TR312782**

#### OriGene Technologies, Inc.

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### **GGT1** Human shRNA Plasmid Kit (Locus ID 2678)

#### **Product data:**

**Product Type:** shRNA Plasmids

**Product Name:** GGT1 Human shRNA Plasmid Kit (Locus ID 2678)

**Locus ID:** 2678

**Synonyms:** CD224; D22S672; D22S732; GGT; GGT 1; GTG

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: GGT1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

2678). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 001032364, NM 001032365, NM 001288833, NM 005265, NM 013421, NM 013430,

NM 001032364.1, NM 001032364.2, NM 005265.1, NM 005265.2, NM 005265.3, NM 013430.1, NM 001032365.1, NM 001032365.2, NM 001288833.1, NM 013421.1, BC025927, BC035341, BC065921, BC069326, BC069473, BC069504, BC128234, BC128238,

BC128239, BM673976, NM 001288833.2

UniProt ID: P19440

**Summary:** The enzyme encoded by this gene is a type I gamma-glutamyltransferase that catalyzes the

transfer of the glutamyl moiety of glutathione to a variety of amino acids and dipeptide acceptors. The enzyme is composed of a heavy chain and a light chain, which are derived from a single precursor protein. It is expressed in tissues involved in absorption and secretion and may contribute to the etiology of diabetes and other metabolic disorders. Multiple alternatively spliced variants have been identified. There are a number of related genes present on chromosomes 20 and 22, and putative pseudogenes for this gene on

chromosomes 2, 13, and 22. [provided by RefSeq, Jan 2014]

**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).