

Product datasheet for TL305633

OriGene Technologies, Inc.

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Calpastatin (CAST) Human shRNA Plasmid Kit (Locus ID 831)

Product data:

Product Type: shRNA Plasmids

Product Name: Calpastatin (CAST) Human shRNA Plasmid Kit (Locus ID 831)

Locus ID: 831

Synonyms: BS-17; PLACK

Vector: pGFP-C-shLenti (TR30023)

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

Mammalian Cell

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Selection:

Puromycin

Format: Lentiviral plasmids

Components: CAST - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 831). 5µg

purified plasmid DNA per construct

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

RefSeq: BC016066, NM 001042440, NM 001042441, NM 001042442, NM 001042443, NM 001042444,

NM 001042445, NM 001042446, NM 001190442, NM 001284212, NM 001284213, NM 001330626, NM 001330627, NM 001330628, NM 001330629, NM 001330630,

NM 001330631, NM 001330632, NM 001330633, NM 001330634, NM 001750, NM 173060,

NM 173061, NM 173062, NM 173063, NR 033798, NR 104285, NM 001042444.1,

NM 001042444.2, NM 001750.1, NM 001750.2, NM 001750.3, NM 001750.4, NM 001750.5, NM 001750.6, NM 173060.1, NM 173060.2, NM 173060.3, NM 173060.4, NM 001042440.1,

NM 001042440.2, NM 001042440.3, NM 001042440.4, NM 173061.1, NM 173061.2,

NM 001190442.1, NM 001284213.1, NM 001284213.2, NM 001284213.3, NM 001284212.1, NM 001284212.2, NM 001284212.3, BC016066.1, NM 001042441.1, NM 001042442.1, NM 001042443.1, NM 001042445.1, NM 001042446.1, NM 173063.1, NM 173062.1,

BC013579, BC013579.1, BC078149, BM676369, NM 001042440.5, NM 001750.7

UniProt ID: P20810





Summary:

The protein encoded by this gene is an endogenous calpain (calcium-dependent cysteine protease) inhibitor. It consists of an N-terminal domain L and four repetitive calpain-inhibition domains (domains 1-4), and it is involved in the proteolysis of amyloid precursor protein. The calpain/calpastatin system is involved in numerous membrane fusion events, such as neural vesicle exocytosis and platelet and red-cell aggregation. The encoded protein is also thought to affect the expression levels of genes encoding structural or regulatory proteins. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jun 2010]

shRNA Design:

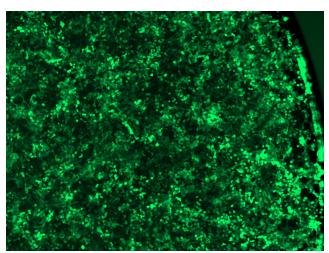
These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

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.

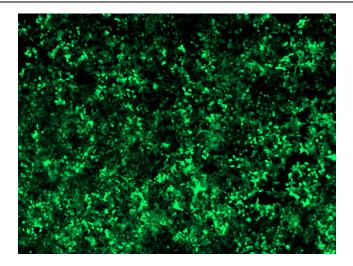
For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating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

Product images:

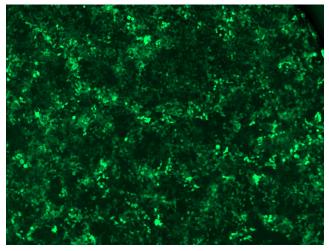


GFP signal was observed under microscope at 48 hours after transduction of TL305633A virus into HEK293 cells. TL305633A virus was prepared using lenti-shRNA TL305633A and [TR30037] packaging kit.

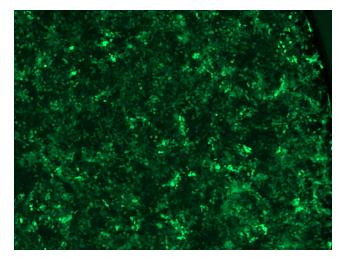




GFP signal was observed under microscope at 48 hours after transduction of TL305633B virus into HEK293 cells. TL305633B virus was prepared using lenti-shRNA TL305633B and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL305633C] virus into HEK293 cells. [TL305633C] virus was prepared using lenti-shRNA [TL305633C] and [TR30037] packaging kit.



GFP signal was observed under microscope at 48 hours after transduction of [TL305633D] virus into HEK293 cells. [TL305633D] virus was prepared using lenti-shRNA [TL305633D] and [TR30037] packaging kit.