

Product datasheet for TR305662

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Calpain 10 (CAPN10) Human shRNA Plasmid Kit (Locus ID 11132)

Product data:

Product Type: shRNA Plasmids

Product Name: Calpain 10 (CAPN10) Human shRNA Plasmid Kit (Locus ID 11132)

Locus ID: 11132

Synonyms: calcium-activated neutral protease; calpain 10; NIDDM1; OTTHUMP00000164509

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: CAPN10 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

11132). 5µg purified plasmid DNA per construct

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

RefSeq: NM 021251, NM 023083, NM 023084, NM 023085, NM 023086, NM 023087, NM 023088,

NM 023089, NM 023083.1, NM 023083.2, NM 023085.1, NM 023085.2, NM 023085.3,

NM 021251.2, NM 023089.1, BC004260, BC004260.1, BC007553, BC107088

UniProt ID: Q9HC96

Summary: Calpains represent a ubiquitous, well-conserved family of calcium-dependent cysteine

proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. The large catalytic subunit has four domains: domain I, the N-terminal regulatory domain that is processed upon calpain activation; domain II, the protease domain; domain III, a linker domain of unknown function; and domain IV, the calmodulin-like calciumbinding domain. This gene encodes a large subunit. It is an atypical calpain in that it lacks the calmodulin-like calcium-binding domain and instead has a divergent C-terminal domain. It is similar in organization to calpains 5 and 6. This gene is associated with type 2 or non-insulindependent diabetes mellitus (NIDDM), and is located within the NIDDM1 region. Multiple alternative transcript variants have been described for this gene. [provided by RefSeq, Sep

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).