

## **Product datasheet for TL311215**

## OriGene Technologies, Inc.

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## Nebulin (NEB) Human shRNA Plasmid Kit (Locus ID 4703)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Nebulin (NEB) Human shRNA Plasmid Kit (Locus ID 4703)

**Locus ID:** 4703

**Synonyms:** AMC6; NEB177D; NEM2

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

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

**Mammalian Cell** 

Selection:

Puromycin

Format: Lentiviral plasmids

Components: NEB - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 4703). 5µg

purified plasmid DNA per construct

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

RefSeq: NM 001164507, NM 001164508, NM 001271208, NM 004543, NM 004543.2, NM 004543.3,

NM 004543.4, NM 001164507.1, NM 001164508.1, BC012533, BC022421, BC029384,

BC050436, BC056251, BC063136, BC105590

UniProt ID: P20929

**Summary:** This gene encodes nebulin, a giant protein component of the cytoskeletal matrix that coexists

with the thick and thin filaments within the sarcomeres of skeletal muscle. In most vertebrates, nebulin accounts for 3 to 4% of the total myofibrillar protein. The encoded protein contains approximately 30-amino acid long modules that can be classified into 7 types and other repeated modules. Protein isoform sizes vary from 600 to 800 kD due to alternative splicing that is tissue-, species-, and developmental stage-specific. Of the 183 exons in the nebulin gene, at least 43 are alternatively spliced, although exons 143 and 144 are not found in the same transcript. Of the several thousand transcript variants predicted for

nebulin, the RefSeq Project has decided to create three representative RefSeq records. Mutations in this gene are associated with recessive nemaline myopathy. [provided by

RefSeq, Sep 2009]

**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).