

## **Product datasheet for TL311095**

## OriGene Technologies, Inc.

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## NRG3 Human shRNA Plasmid Kit (Locus ID 10718)

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: NRG3 Human shRNA Plasmid Kit (Locus ID 10718)

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**Synonyms:** HRG3; pro-NRG3

Vector: pGFP-C-shLenti (TR30023)

E. coli Selection: Chloramphenicol (34 ug/m

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Mammalian Cell Puromycin

Selection:

Format: Lentiviral plasmids

Components: NRG3 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 10718).

5µg purified plasmid DNA per construct

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

RefSeq: NM 001010848, NM 001165972, NM 001165973, NM 001010848.1, NM 001010848.2,

NM 001165973.1, NM 001165972.1, BC136811, BC143665, NM 001370082, NM 001370083, NR 163251, NR 163253, NM 001370081, NM 001370084, NR 163252, NM 001010848.4

UniProt ID: P56975

**Summary:** This gene is a member of the neuregulin gene family. This gene family encodes ligands for

the transmembrane tyrosine kinase receptors ERBB3 and ERBB4 - members of the epidermal growth factor receptor family. Ligand binding activates intracellular signaling cascades and the induction of cellular responses including proliferation, migration, differentiation, and survival or apoptosis. This gene encodes neuregulin 3 (NRG3). NRG3 has been shown to activate the tyrosine phosphorylation of its cognate receptor, ERBB4, and is thought to influence neuroblast proliferation, migration and differentiation by signalling through ERBB4. NRG3 also promotes mammary differentiation during embryogenesis. Linkage studies have implicated this gene as a susceptibility locus for schizophrenia and schizoaffective disorder.

Alternative splicing results in multiple transcript variants encoding distinct isoforms.

Additional transcript variants have been described but their biological validity has not been

verified.[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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a>. If you need a special design or shRNA sequence, please utilize our <a href="mailto:custom shRNA service">custom shRNA service</a>.

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).