

Product datasheet for TL320433V

OriGene Technologies, Inc.

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Natriuretic Peptide Receptor A (NPR1) Human shRNA Lentiviral Particle (Locus ID 4881)

Product data:

Product Type: shRNA Lentiviral Particles

Product Name: Natriuretic Peptide Receptor A (NPR1) Human shRNA Lentiviral Particle (Locus ID 4881)

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Synonyms: ANPa; ANPRA; GUC2A; GUCY2A; NPRA

Vector: pGFP-C-shLenti (TR30023)

Format: Lentiviral particles

Components: NPR1 - Human shRNA lentiviral particles (4 unique 29mer target-specific shRNA, 1 scramble

control), 0.5 ml each, >10^7 TU/ml.

RefSeq: NM 000906, NM 000906.1, NM 000906.2, NM 000906.3, BC063304, BC063304.1

UniProt ID: P16066

Summary: Guanylyl cyclases, catalyzing the production of cGMP from GTP, are classified as soluble and

membrane forms (Garbers and Lowe, 1994 [PubMed 7982997]). The membrane guanylyl cyclases, often termed guanylyl cyclases A through F, form a family of cell-surface receptors

with a similar topographic structure: an extracellular ligand-binding domain, a single

membrane-spanning domain, and an intracellular region that contains a protein kinase-like domain and a cyclase catalytic domain. GC-A and GC-B function as receptors for natriuretic peptides; they are also referred to as atrial natriuretic peptide receptor A (NPR1) and type B (NPR2; MIM 108961). Also see NPR3 (MIM 108962), which encodes a protein with only the ligand-binding transmembrane and 37-amino acid cytoplasmic domains. NPR1 is a membrane-bound guanylate cyclase that serves as the receptor for both atrial and brain natriuretic peptides (ANP (MIM 108780) and BNP (MIM 600295), respectively).[supplied by

OMIM, May 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>.





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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).