

Product datasheet for TG312415

OriGene Technologies, Inc.

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Hexokinase II (HK2) Human shRNA Plasmid Kit (Locus ID 3099)

Product data:

Product Type: shRNA Plasmids

Product Name: Hexokinase II (HK2) Human shRNA Plasmid Kit (Locus ID 3099)

Locus ID: 3099

Synonyms: HKII; HXK2

Vector: pGFP-V-RS (TR30007)

E. coli Selection: Kanamycin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: HK2 - Human, 4 unique 29mer shRNA constructs in retroviral GFP vector(Gene ID = 3099). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-V-RS Vector, TR30013, included for free.

RefSeq: NM 000189, NM 000189.1, NM 000189.2, NM 000189.3, NM 000189.4, BC064369,

BC064369.1, BC021116, BM706373, BM912287, NM 000189.5

UniProt ID: P52789

Summary: Hexokinases phosphorylate glucose to produce glucose-6-phosphate, the first step in most

glucose metabolism pathways. This gene encodes hexokinase 2, the predominant form found in skeletal muscle. It localizes to the outer membrane of mitochondria. Expression of this gene is insulin-responsive, and studies in rat suggest that it is involved in the increased rate

of glycolysis seen in rapidly growing cancer cells. [provided by RefSeq, Apr 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).