

Resource Summary Report

Generated by [PRECISE-TBI](#) on Aug 9, 2026

PBS/pU6- HIF1 alpha RNAi plasmid 1

RRID:Addgene_21103

Type: Plasmid

Proper Citation

RRID:Addgene_21103

Plasmid Information

URL: <http://www.addgene.org/21103>

Proper Citation: RRID:Addgene_21103

Insert Name: RNAi against hypoxia inducible factor 1alpha

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:19131628](#)

Vector Backbone Description: Backbone Size:3300; Vector Backbone:PBS/U6; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: HIF1? RNAi target sequence: GAGCTTGCTCATCAGTTGCCA

Plasmid Name: PBS/pU6- HIF1 alpha RNAi plasmid 1

Record Creation Time: 20220422T222054+0000

Record Last Update: 20260808T081406+0000

Ratings and Alerts

No rating or validation information has been found for PBS/pU6- HIF1 alpha RNAi plasmid 1.

No alerts have been found for PBS/pU6- HIF1 alpha RNAi plasmid 1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 11 mentions in open access literature.

Listed below are recent publications. The full list is available at [PRECISE-TBI](#) .

Arora L, et al. (2022) Hypoxia-induced miR-210-3p expression in lung adenocarcinoma potentiates tumor development by regulating CCL2-mediated monocyte infiltration. *Molecular oncology*.

Kowshik J, et al. (2017) Nimbolide upregulates RECK by targeting miR-21 and HIF-1 α in cell lines and in a hamster oral carcinogenesis model. *Scientific reports*, 7(1), 2045.

Wang X, et al. (2016) SIRT1 expression is refractory to hypoxia and inflammatory cytokines in nucleus pulposus cells: Novel regulation by HIF-1 α and NF- κ B signaling. *Cell biology international*, 40(6), 716.

Johnson ZI, et al. (2015) Aquaporin 1 and 5 expression decreases during human intervertebral disc degeneration: Novel HIF-1-mediated regulation of aquaporins in NP cells. *Oncotarget*, 6(14), 11945.

Nanayakkara G, et al. (2015) Cardioprotective HIF-1 α -frataxin signaling against ischemia-reperfusion injury. *American journal of physiology. Heart and circulatory physiology*, 309(5), H867.

Tran CM, et al. (2013) Hypoxia-inducible factor (HIF)-1 α and CCN2 form a regulatory circuit in hypoxic nucleus pulposus cells: CCN2 suppresses HIF-1 α level and transcriptional activity. *The Journal of biological chemistry*, 288(18), 12654.

Wiesner D, et al. (2013) Fumaric acid esters stimulate astrocytic VEGF expression through HIF-1 α and Nrf2. *PloS one*, 8(10), e76670.

Gogate SS, et al. (2012) Tonicity enhancer binding protein (TonEBP) and hypoxia-inducible factor (HIF) coordinate heat shock protein 70 (Hsp70) expression in hypoxic nucleus pulposus cells: role of Hsp70 in HIF-1 α degradation. *Journal of bone and mineral research : the official journal of the American Society for Bone and Mineral Research*, 27(5), 1106.

Fujita N, et al. (2012) Expression of prolyl hydroxylases (PHDs) is selectively controlled by HIF-1 and HIF-2 proteins in nucleus pulposus cells of the intervertebral disc: distinct roles of PHD2 and PHD3 proteins in controlling HIF-1 α activity in hypoxia. *The Journal of biological chemistry*, 287(20), 16975.

Gogate SS, et al. (2011) Hypoxic regulation of β -1,3-glucuronyltransferase 1 expression in nucleus pulposus cells of the rat intervertebral disc: role of hypoxia-inducible factor proteins. *Arthritis and rheumatism*, 63(7), 1950.

Skubutyte R, et al. (2010) Hypoxia-inducible factor regulation of ANK expression in nucleus pulposus cells: possible implications in controlling dystrophic mineralization in the intervertebral disc. *Arthritis and rheumatism*, 62(9), 2707.