

Resource Summary Report

Generated by [NIF](#) on Aug 22, 2026

HRE-luciferase

RRID:Addgene_26731

Type: Plasmid

Proper Citation

RRID:Addgene_26731

Plasmid Information

URL: <http://www.addgene.org/26731>

Proper Citation: RRID:Addgene_26731

Insert Name: Hypoxia Responsive Elements (3)

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:18268343](#)

Vector Backbone Description: Backbone Marker:Promega; Backbone Size:0; Vector Backbone:pGL2; Vector Types:Mammalian Expression, Luciferase; Bacterial Resistance:Ampicillin

Comments: Three hypoxia response elements (24-mers) from the Pgk-1 gene upstream of firefly luciferase. HRE: TGTCACGTCCTGCACGACTCTAGT Note that one of the elements is a 22/24 match for the above sequence. This difference is not known to affect function.

Plasmid Name: HRE-luciferase

Record Creation Time: 20220422T222120+0000

Record Last Update: 20260815T081256+0000

Ratings and Alerts

No rating or validation information has been found for HRE-luciferase.

No alerts have been found for HRE-luciferase.

Data and Source Information

Usage and Citation Metrics

We found 90 mentions in open access literature.

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

Mello RM, et al. (2025) BMAL1 and ARNT enable circadian HIF2? responses in clear cell renal cell carcinoma. *Nature communications*, 16(1), 5834.

Purandare N, et al. (2025) Pseudohypoxia-Stabilized HIF2? Transcriptionally Inhibits MNRR1, a Druggable Target in MELAS. *Cells*, 14(14).

Lopez-Mejia A, et al. (2025) Hypoxia inducible factor 3-alpha promotes a malignant phenotype in colorectal cancer cells. *IUBMB life*, 77(2), e70007.

Magnavacca A, et al. (2025) Assessment of the Polyphenolic Profile and Beneficial Effects of Red and Green Propolis in Skin Inflammatory Conditions and Oxidative Stress. *Biomedicines*, 13(9).

Sojka DR, et al. (2024) The human testis-enriched HSPA2 interacts with HIF-1? in epidermal keratinocytes, yet HIF-1? stability and HIF-1-dependent gene expression rely on the HSPA (HSP70) activity. *Biochimica et biophysica acta. Molecular cell research*, 1871(5), 119735.

Qiao L, et al. (2024) USP11 promotes glycolysis by regulating HIF-1? stability in hepatocellular carcinoma. *Journal of cellular and molecular medicine*, 28(2), e18017.

Pozzoli C, et al. (2024) *Castanea sativa* Mill. By-Products: Investigation of Potential Anti-Inflammatory Effects in Human Intestinal Epithelial Cells. *Molecules (Basel, Switzerland)*, 29(16).

Ting KKY, et al. (2024) Cholesterol accumulation impairs HIF-1?-dependent immunometabolic reprogramming of LPS-stimulated macrophages by upregulating the NRF2 pathway. *Scientific reports*, 14(1), 11162.

Elbassiouny AA, et al. (2024) Evolution of a novel regulatory mechanism of hypoxia inducible factor in hypoxia-tolerant electric fishes. *The Journal of biological chemistry*, 300(3), 105727.

Mello RM, et al. (2024) BMAL1-HIF2? heterodimers contribute to ccRCC. *Research square*.

Nan Y, et al. (2023) m6A demethylase FTO stabilizes LINK-A to exert oncogenic roles via MCM3-mediated cell-cycle progression and HIF-1? activation. *Cell reports*, 42(10), 113273.

Guo J, et al. (2023) The E3 ubiquitin ligase RBCK1: Implications in the tumor immune microenvironment and antiangiogenic therapy of glioma. *Computational and structural biotechnology journal*, 21, 5212.

Jehanno C, et al. (2023) Synergistic activation of genes promoting invasiveness by dual deprivation in oxygen and nutrients. *International journal of experimental pathology*, 104(2), 64.

Campero-Romero AN, et al. (2023) Extracellular vesicles from neural progenitor cells promote functional recovery after stroke in mice with pharmacological inhibition of neurogenesis. *Cell death discovery*, 9(1), 272.

Kumar N, et al. (2023) Histone acetyltransferase 1 (HAT1) acetylates hypoxia-inducible factor 2 alpha (HIF2A) to execute hypoxia response. *Biochimica et biophysica acta. Gene regulatory mechanisms*, 1866(1), 194900.

Gao W, et al. (2022) Mitochondrial DHODH regulates hypoxia-inducible factor 1 expression in OTSCC. *American journal of cancer research*, 12(1), 48.

Chinn HK, et al. (2022) Hypoxia-inducible lentiviral gene expression in engineered human macrophages. *Journal for immunotherapy of cancer*, 10(6).

Vanderhaeghen T, et al. (2022) Reprogramming of glucocorticoid receptor function by hypoxia. *EMBO reports*, 23(1), e53083.

Wu Y, et al. (2022) Endothelial PPAR γ facilitates the post-ischemic vascular repair through interaction with HIF1 α . *Theranostics*, 12(4), 1855.

Preda MB, et al. (2021) Short lifespan of syngeneic transplanted MSC is a consequence of in vivo apoptosis and immune cell recruitment in mice. *Cell death & disease*, 12(6), 566.