# Resource Summary Report

Generated by dkNET on Aug 19, 2026

## pcDNA3 mHIF-2? MYC (P405A/P530V/N851A)

RRID:Addgene_44027
Type: Plasmid

### Proper Citation

RRID:Addgene_44027

### Plasmid Information

**URL:** http://www.addgene.org/44027

**Proper Citation:** RRID:Addgene_44027

**Insert Name:** mHIF-2? (P405A/P530V/N851A)

**Organism:** Mus musculus

**Bacterial Resistance:** Ampicillin

**Defining Citation:** PMID:17804822

**Vector Backbone Description:** Backbone Marker:Invitrogen; Backbone Size:5446; Vector Backbone:pcDNA3; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

**Comments:** This plasmid encodes an oxygen-regulation insensitive (normoxia-stable and active) full-length murine HIF-2?. Full-length murine HIF-2? cDNA was generated by reverse transcription-PCR and inserted into a pcDNA3 expression vector by using primers incorporated with restriction sites. A 10-amino-acid c-myc tag was further inserted at the C terminus of the HIF-2? cDNAs by using a Pfu-PCR-based protocol. The same Pfu-PCR protocol was then used to change residues Proline 405, Proline 530 and Asparagine 851. The newly constructed plasmid was sequenced to confirm encoding of the correct protein. This plasmid has an A94V polymorphism that does not affect protein function. Alternate plasmid names: HIF-2? triple mutant (TM); pcDNA3 HIF-2? TM

**Plasmid Name:** pcDNA3 mHIF-2? MYC (P405A/P530V/N851A)

**Relevant Mutation:** P405A, P530V, N851A

**Record Creation Time:** 20220422T222228+0000

**Record Last Update:** 20260815T081511+0000

## Ratings and Alerts

No rating or validation information has been found for pcDNA3 mHIF-2? MYC (P405A/P530V/N851A).

No alerts have been found for pcDNA3 mHIF-2? MYC (P405A/P530V/N851A).

## Data and Source Information

**Source:** Addgene

## Usage and Citation Metrics

We found 7 mentions in open access literature.

**Listed below are recent publications.** The full list is available at dkNET .


Zhao W, et al. (2025) HIF2? inhibits glutaminase clustering in mitochondria to sustain growth of clear cell Renal Cell Carcinoma. bioRxiv : the preprint server for biology.

Ruan W, et al. (2025) BMAL1-HIF2A heterodimer modulates circadian variations of myocardial injury. Nature, 641(8064), 1017.

Ruan W, et al. (2024) The BMAL1/HIF2A heterodimer modulates circadian variations of myocardial injury. Research square.

Kunkemoeller B, et al. (2021) The transcriptional coregulator CITED2 suppresses expression of IRS-2 and impairs insulin signaling in endothelial cells. American journal of physiology. Endocrinology and metabolism, 321(2), E252.

Browe DC, et al. (2019) Hypoxia Activates the PTHrP -MEF2C Pathway to Attenuate Hypertrophy in Mesenchymal Stem Cell Derived Cartilage. Scientific reports, 9(1), 13274.

Xie L, et al. (2018) Transient HIF2A inhibition promotes satellite cell proliferation and muscle regeneration. The Journal of clinical investigation, 128(6), 2339.

Gu YF, et al. (2017) Modeling Renal Cell Carcinoma in Mice: Bap1 and Pbrm1 Inactivation Drive Tumor Grade. Cancer discovery, 7(8), 900.