Resource Summary Report

Generated by dkNET on Aug 7, 2026

GFP-HP1alpha

RRID:Addgene_17652
Type: Plasmid

Proper Citation

RRID:Addgene_17652

Plasmid Information

URL: http://www.addgene.org/17652

Proper Citation: RRID:Addgene_17652

Insert Name: HP1 alpha

Organism: Homo sapiens

Bacterial Resistance: Ampicillin

Defining Citation: PMID:12560555

Vector Backbone Description: Backbone Marker:Zentgraf Lab; Backbone Size:0; Vector Backbone:pBCHGN; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: See author's map for more information.

Plasmid Name: GFP-HP1alpha

Record Creation Time: 20220422T222019+0000

Record Last Update: 20260801T080858+0000

Ratings and Alerts

No rating or validation information has been found for GFP-HP1alpha.

No alerts have been found for GFP-HP1alpha.

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 20 mentions in open access literature.

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

Taylor ER, et al. (2026) Local heterochromatin enrichment promotes telomere clustering and PML nuclear body assembly at telomeres. Cell reports, 45(3), 117004.

Bohra D, et al. (2026) HP1 isoforms direct repair pathway choice in response to heterochromatin double-strand breaks. The Journal of cell biology, 225(3).

Wu Y, et al. (2025) Viscoelastic extracellular matrix enhances epigenetic remodeling and cellular plasticity. Nature communications, 16(1), 4054.

Rashid F, et al. (2023) Mechanomemory in protein diffusivity of chromatin and nucleoplasm after force cessation. Proceedings of the National Academy of Sciences of the United States of America, 120(13), e2221432120.

Mitrentsi I, et al. (2022) Heterochromatic repeat clustering imposes a physical barrier on homologous recombination to prevent chromosomal translocations. Molecular cell, 82(11), 2132.

Liu W, et al. (2022) Dynamic Heterochromatin States in Anisotropic Nuclei of Cells on Aligned Nanofibers. ACS nano, 16(7), 10754.

Yuan B, et al. (2022) Wiskott-Aldrich syndrome protein forms nuclear condensates and regulates alternative splicing. Nature communications, 13(1), 3646.

Jain S, et al. (2021) TALEN outperforms Cas9 in editing heterochromatin target sites. Nature communications, 12(1), 606.

Strom AR, et al. (2021) HP1? is a chromatin crosslinker that controls nuclear and mitotic chromosome mechanics. eLife, 10.

Gao Y, et al. (2021) Interrogation of the dynamic properties of higher-order heterochromatin using CRISPR-dCas9. Molecular cell, 81(20), 4287.

Dutta P, et al. (2020) Unphosphorylated STAT3 in heterochromatin formation and tumor suppression in lung cancer. BMC cancer, 20(1), 145.

Legartová S, et al. (2019) DNA Damage Changes Distribution Pattern and Levels of HP1 Protein Isoforms in the Nucleolus and Increases Phosphorylation of HP1?-Ser88. Cells, 8(9).

Shin Y, et al. (2018) Liquid Nuclear Condensates Mechanically Sense and Restructure the Genome. Cell, 175(6), 1481.

Chow TT, et al. (2018) Local enrichment of HP1alpha at telomeres alters their structure and regulation of telomere protection. Nature communications, 9(1), 3583.

Wang H, et al. (2018) CRISPR-Mediated Programmable 3D Genome Positioning and Nuclear Organization. Cell, 175(5), 1405.

Hinde E, et al. (2015) Spatiotemporal regulation of Heterochromatin Protein 1-alpha oligomerization and dynamics in live cells. Scientific reports, 5, 12001.

Magni M, et al. (2015) CCAR2/DBC1 is required for Chk2-dependent KAP1 phosphorylation and repair of DNA damage. Oncotarget, 6(19), 17817.

Yang M, et al. (2015) A novel role of PRR14 in the regulation of skeletal myogenesis. Cell death & disease, 6(4), e1734.

Toh KC, et al. (2015) Actin cytoskeleton differentially alters the dynamics of lamin A, HP1? and H2B core histone proteins to remodel chromatin condensation state in living cells. Integrative biology : quantitative biosciences from nano to macro, 7(10), 1309.

Foltánková V, et al. (2013) DNA-damage response in chromatin of ribosomal genes and the surrounding genome. Gene, 522(2), 156.