

Resource Summary Report

Generated by [dkNET](#) on Jul 30, 2026

pGEM-HE-h_bPAC_cmyc

RRID:Addgene_28134

Type: Plasmid

Proper Citation

RRID:Addgene_28134

Plasmid Information

URL: <http://www.addgene.org/28134>

Proper Citation: RRID:Addgene_28134

Insert Name: humanized photoactivated adenylyl cyclase

Organism: Beggiatoa sp. PS

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21030594](#)

Vector Backbone Description: Backbone Size:3000; Vector Backbone:pGEM-HE; Vector Types:in vitro transcription; Bacterial Resistance:Ampicillin

Comments: pGEM-HE is a derivative of pGEM3Z vector(Promega) modified after Liman, E.R., Tytgat, J. & Hess,P.; Neuron 9, 1992

Plasmid Name: pGEM-HE-h_bPAC_cmyc

Record Creation Time: 20220422T222126+0000

Record Last Update: 20260725T074525+0000

Ratings and Alerts

No rating or validation information has been found for pGEM-HE-h_bPAC_cmyc.

No alerts have been found for pGEM-HE-h_bPAC_cmyc.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 6 mentions in open access literature.

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

Nilsson CI, et al. (2025) Somatostatin triggers local cAMP and Ca²⁺ signaling in primary cilia to modulate pancreatic β -cell function. The EMBO journal, 44(6), 1663.

Takizawa M, et al. (2022) Development of a red fluorescent protein-based cGMP indicator applicable for live-cell imaging. Communications biology, 5(1), 833.

Yang S, et al. (2021) PACmn for improved optogenetic control of intracellular cAMP. BMC biology, 19(1), 227.

Moraga-Cid G, et al. (2020) Modulation of glycine receptor single-channel conductance by intracellular phosphorylation. Scientific reports, 10(1), 4804.

Luyben TT, et al. (2020) Optogenetic Manipulation of Postsynaptic cAMP Using a Novel Transgenic Mouse Line Enables Synaptic Plasticity and Enhances Depolarization Following Tetanic Stimulation in the Hippocampal Dentate Gyrus. Frontiers in neural circuits, 14, 24.

Harada K, et al. (2017) Red fluorescent protein-based cAMP indicator applicable to optogenetics and in vivo imaging. Scientific reports, 7(1), 7351.