

# Resource Summary Report

Generated by [dkNET](#) on Sep 4, 2026

## pCAGGS-PHFF-sh-hBVRA

RRID:Addgene\_100285

Type: Plasmid

### Proper Citation

RRID:Addgene\_100285

### Plasmid Information

**URL:** <http://www.addgene.org/100285>

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**Insert Name:** MTS-PcyA-FLAG-P2A-MTS-HA-HO1-P2A-MTS-Myc-Fd-P2A-MTS-Fnr-T7 (synthetic genes)

**Organism:** Thermosynechococcus elongatus bp-1 for PcyA and HO1, and Synechocystis sp. PCC 6803 for Fd and Fnr.

**Bacterial Resistance:** Ampicillin

**Defining Citation:** [PMID:29078307](#)

**Vector Backbone Description:** Backbone Marker:Junichi Miyazaki (Osaka University, Japan); Backbone Size:4870; Vector Backbone:pCAGGS; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

**Comments:** Expression vector for Phycocyanobilin (PCB) synthesis in mammalian cells. In addition, shRNA targeting to human BVRA is expressed so that PCB is further accumulated.

**Plasmid Name:** pCAGGS-PHFF-sh-hBVRA

**Relevant Mutation:** All genes are codon-optimized for expression in human cells.

**Record Creation Time:** 20220422T221447+0000

**Record Last Update:** 20260902T040919+0000

### Ratings and Alerts

No rating or validation information has been found for pCAGGS-PHFF-sh-hBVRA.

No alerts have been found for pCAGGS-PHFF-sh-hBVRA.

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## Data and Source Information

**Source:** [Addgene](#)

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## Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Remeeva AA, et al. (2025) Structure and effective brightness of near-infrared fluorescent protein iRFP713/C15S/V254C complexed with phycocyanobilin. The FEBS journal.