

Resource Summary Report

Generated by [RRID](#) on Sep 3, 2026

[pEF 1-PHD-4](#)

RRID:Addgene_20088

Type: Plasmid

Proper Citation

RRID:Addgene_20088

Plasmid Information

URL: <http://www.addgene.org/20088>

Proper Citation: RRID:Addgene_20088

Insert Name: PHD

Organism: *S. lycopersicum*

Bacterial Resistance: Kanamycin

Vector Backbone Description: Backbone Size:4777; Vector Backbone:pDONR221-P4P1R; Vector Types:Synthetic Biology, plant Gateway vector; Bacterial Resistance:Kanamycin

Comments: Depositing scientist is aware of discrepancies between Addgene's sequence and their own. They have confirmed the differences and tested the plasmids--they are completely functional.

Plasmid Name: pEF 1-PHD-4

Record Creation Time: 20220422T222049+0000

Record Last Update: 20260902T043618+0000

Ratings and Alerts

No rating or validation information has been found for pEF 1-PHD-4.

No alerts have been found for pEF 1-PHD-4.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 2 mentions in open access literature.

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

Estornell LH, et al. (2012) Exploiting Multisite Gateway and pENFRUIT plasmid collection for fruit genetic engineering. *Methods in molecular biology* (Clifton, N.J.), 847, 351.

Estornell LH, et al. (2009) A multisite gateway-based toolkit for targeted gene expression and hairpin RNA silencing in tomato fruits. *Plant biotechnology journal*, 7(3), 298.