

Resource Summary Report

Generated by [RRID](#) on Aug 20, 2026

pBAD-D4

RRID:Addgene_37473

Type: Plasmid

Proper Citation

RRID:Addgene_37473

Plasmid Information

URL: <http://www.addgene.org/37473>

Proper Citation: RRID:Addgene_37473

Insert Name: D4 second generation cameleon (calcium sensor)

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:16720273](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:4000; Vector Backbone:pBAD; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

Comments: Genetically encoded, ratiometric, calcium biosensor that contains enhanced CFP and citrine. D4 does not bind wild-type calmodulin. It has a K_d' of 195 microM. See also Palmer & Tsien (2006) Nature Protocols.

Plasmid Name: pBAD-D4

Record Creation Time: 20220422T222158+0000

Record Last Update: 20260815T081415+0000

Ratings and Alerts

No rating or validation information has been found for pBAD-D4.

No alerts have been found for pBAD-D4.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 3 mentions in open access literature.

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

Luptak I, et al. (2019) Genetically targeted fluorescent probes reveal dynamic calcium responses to adrenergic signaling in multiple cardiomyocyte compartments. The international journal of biochemistry & cell biology, 114, 105569.

Gudlur A, et al. (2018) Calcium sensing by the STIM1 ER-luminal domain. Nature communications, 9(1), 4536.

Bonza MC, et al. (2013) Analyses of Ca²⁺ accumulation and dynamics in the endoplasmic reticulum of Arabidopsis root cells using a genetically encoded Cameleon sensor. Plant physiology, 163(3), 1230.