

Resource Summary Report

Generated by [RRID](#) on Aug 19, 2026

pcDNA-mito-ZifCV1.49

RRID:Addgene_59009

Type: Plasmid

Proper Citation

RRID:Addgene_59009

Plasmid Information

URL: <http://www.addgene.org/59009>

Proper Citation: RRID:Addgene_59009

Insert Name: mito-ZifCV1.49 genetically encoded Zn(II) sensor

Organism: Synthetic

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:22850482](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:5500; Vector Backbone:pcDNA3.1(+); Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Comments: Genetically encoded, ratiometric, fluorescent biosensor targeted to the mitochondria. mito-ZifCV1.49 contains 4 tandem repeats of the first 29 aa of human cox subunit 8a (MSVLTPLLRGLTGSARRLPVPRAKIHSL). HindIII restriction sites are at the 5' and 3' ends of the mitochondrial targeting sequence. Zn(II)-binding domain derived from mammalian Zif268. Contains truncated CFP and circularly permuted Venus 49.

Plasmid Name: pcDNA-mito-ZifCV1.49

Record Creation Time: 20220422T222340+0000

Record Last Update: 20260815T081720+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA-mito-ZifCV1.49.

No alerts have been found for pcDNA-mito-ZifCV1.49.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.