

Resource Summary Report

Generated by [SPARC SAWG](#) on Aug 9, 2026

EcMBP165-cpGFP.PPYF.T203V.pRSET

RRID:Addgene_33373

Type: Plasmid

Proper Citation

RRID:Addgene_33373

Plasmid Information

URL: <http://www.addgene.org/33373>

Proper Citation: RRID:Addgene_33373

Insert Name: Improved MBP based Maltose Biosensor

Organism: E. coli

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:21989929](#)

Vector Backbone Description: Backbone Marker:Invitrogen; Backbone Size:2300; Vector Backbone:pRSET-A; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

Comments: The GFP-T203V mutation decreases the fluorescence emission of the apo state and increases that of the saturated state in GCaMP2. In the context of MBP165-cpGFP.PPYF, the T203V mutation decreases the fluorescence emission of the apo state by half, whereas saturated fluorescence and affinity are unchanged, increasing F/F_{apo} to 6.5.

Plasmid Name: EcMBP165-cpGFP.PPYF.T203V.pRSET

Relevant Mutation: cpGFP146 variant from GCaMP2 inserted between AA165-166 of MBP with T203V mutation in GFP.

Record Creation Time: 20220422T222145+0000

Record Last Update: 20260808T081544+0000

Ratings and Alerts

No rating or validation information has been found for EcMBP165-cpGFP.PPYF.T203V.pRSET.

No alerts have been found for EcMBP165-cpGFP.PPYF.T203V.pRSET.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.