Resource Summary Report

Generated by RRID on Aug 20, 2026

pFastBac StrepII msfGFP TEV cloning vector with BioBrick PolyPromoter LIC Subcloning (438-Rgfp)

RRID:Addgene_55221
Type: Plasmid

Proper Citation

RRID:Addgene_55221

Plasmid Information

URL: http://www.addgene.org/55221

Proper Citation: RRID:Addgene_55221

Bacterial Resistance: Ampicillin

Defining Citation: PMID:28668116

Vector Backbone Description: Vector Backbone:pFastBac; Vector Types:Insect Expression; Bacterial Resistance:Ampicillin

Comments: In order to increase the efficiency of subcloning with the Series-11 Macrobac plasmids we developed a new strategy the uses LIC (Ligation Independent Cloning). The problem with the Series-11 ligation mediated subcloning was that when the plasmid size approached or exceeded 20 kb we had to screen many colonies to find a positive. We developed a strategy to use LIC for subcloning. Because this method uses no ligase, the cloning background associated with re-ligation of the empty plasmid are eliminated. 438-Rgfp has a TEV cleavable StrepII and msfGFP at the N-terminus. The 438-Rgfp vector use the LICv1 Forward and Reverse primers. LICv1Forward - 5'-TACTTCCAATCCAATGCA-3' LICv1 Reverse - 5'-TTATCCACTTCCAATGTTATTA-3' As the target plasmid size gets >20kb you may have to increase the amount of DNA you anneal and/or transform. We have found this method gives no background colonies at all and 100% of the colonies we pick are positive. The cells we transform into are XL1Blues with a competency ~6x10^7cfu/ul. For more information, please see our website: http://qb3.berkeley.edu/qb3/macrolab/

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Ratings and Alerts

No rating or validation information has been found for pFastBac StrepII msfGFP TEV cloning vector with BioBrick PolyPromoter LIC Subcloning (438-Rgfp).

No alerts have been found for pFastBac StrepII msfGFP TEV cloning vector with BioBrick PolyPromoter LIC Subcloning (438-Rgfp).

Data and Source Information

Source: Addgene

Usage and Citation Metrics

We found 6 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID .

Loeff L, et al. (2025) Mechanistic basis for PYROXD1-mediated protection of the human tRNA ligase complex against oxidative inactivation. Nature structural & molecular biology, 32(7), 1205.

Asanovi? I, et al. (2021) The oxidoreductase PYROXD1 uses NAD(P)+ as an antioxidant to sustain tRNA ligase activity in pre-tRNA splicing and unfolded protein response. Molecular cell, 81(12), 2520.

Kroupova A, et al. (2021) Molecular architecture of the human tRNA ligase complex. eLife, 10.

Boneberg FM, et al. (2019) Molecular mechanism of the RNA helicase DHX37 and its activation by UTP14A in ribosome biogenesis. RNA (New York, N.Y.), 25(6), 685.

Booth EA, et al. (2016) Effects of Bni5 Binding on Septin Filament Organization. Journal of molecular biology, 428(24 Pt B), 4962.

?led? P, et al. (2016) Structural insights into the molecular mechanism of the m(6)A writer complex. eLife, 5.