

Resource Summary Report

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

pstb-LAFR5

RRID:Addgene_86169

Type: Plasmid

Proper Citation

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Plasmid Information

URL: <http://www.addgene.org/86169>

Proper Citation: RRID:Addgene_86169

Bacterial Resistance: Tetracycline

Defining Citation: [PMID:22685282](#)

Vector Backbone Description: Backbone Marker:Keen et al. (1988) Gene 70:191-197; Backbone Size:22000; Vector Backbone:pLAFR5; Vector Types:Bacterial Expression; Bacterial Resistance:Tetracycline

Comments: For expression in *S. meliloti*, this is the information on its construction and for cloning ORFs into it. 1) This is the sequence of the SMb21651 promoter fragment (reverse comp of 1683333-1682932) promoter fragment from pSymB of *S. meliloti* 1021. It spans the sequence at the beginning of the reference sequence of pSymB through the end of the pSymB plasmid: Primers used to amplify the SMb21651 promoter: SMb21651 promoter forward primer: 5' GCAagcttGGCACGCGTCTGAATGTCCATTGT SMb21651 promoter reverse primer: 5' GCctgcagGTTCGATGTCCGTGCCGCAACT 2) This fragment was amplified and cloned into HindIII/PstI sites of pLAFR5 (Keen et al. (1988) Gene 70:191-197). The full mcs of pLAFR5 is HindIII—PstI—SalI—BamHI—SmaI (not unique)—EcoRI. 3) ORFs to be expressed in pstb-LAFR5 from the Smb21651 promoter can be cloned into PstI/BamHI 4) Important for cloning ORFs into pstb-LAFR5---Since there are uncharacterized ORFs in this promoter sequence, the forward ORF primer should have stop codons, followed by an rbs: PstI ____stop codons__ __rbs and spacer__ ctgcagTAACGTAACGTAAATGGAGTCACCTCT?followed by the ATG of the ORF (The first use of this promoter [in a different construct] and this 3x stop codon/rbs/spacer design is from Zhang and Cheng. (2006) Applied and Environmental Microbiology 74: 2738-2748 The reverse ORF primer doesn't need anything except a BamHI site.

Plasmid Name: pstb-LAFR5

Record Creation Time: 20220422T222554+0000

Record Last Update: 20260815T082131+0000

Ratings and Alerts

No rating or validation information has been found for pstb-LAFR5.

No alerts have been found for pstb-LAFR5.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.