

Resource Summary Report

Generated by [dkNET](#) on Sep 3, 2026

pET22b_PfSSB

RRID:Addgene_103000

Type: Plasmid

Proper Citation

RRID:Addgene_103000

Plasmid Information

URL: <http://www.addgene.org/103000>

Proper Citation: RRID:Addgene_103000

Insert Name: PfSSB

Organism: Plasmodium falciparum

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:29466468](#)

Vector Backbone Description: Vector Backbone:pET22B; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

Comments: The expressed protein is a Plasmodium falciparum single-stranded DNA-binding protein, PfSSB, for subsequent labeling at the single, native cysteine with one IDCC (N-[2-(iodoacetamido)ethyl]-7-diethylaminocoumarin-3-carboxamide) per subunit. This adduct is then used as a fluorescent single-stranded DNA (ssDNA) biosensor, having ~20-fold fluorescence increase on binding ssDNA with very high affinity. PfSSB was expressed without the N-terminal apicoplast localisation sequence (76 amino acids) but amino acids are numbered for the full-length protein, that is the first amino acid in the expressed protein is M77. Protocol See Hedgethorne and Webb (2012), which is also followed for PfSSB purification, except with the omission of the PEI precipitation step. Hedgethorne, K.; Webb, M. R., Fluorescent SSB as a reagentless biosensor for single-stranded DNA. Methods Mol. Biol. 2012, 922, 219-233.

Plasmid Name: pET22b_PfSSB

Record Creation Time: 20220422T221458+0000

Record Last Update: 20260902T040955+0000

Ratings and Alerts

No rating or validation information has been found for pET22b_PfSSB.

No alerts have been found for pET22b_PfSSB.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We found 1 mentions in open access literature.

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

Fu G, et al. (2023) PGAM5 deacetylation mediated by SIRT2 facilitates lipid metabolism and liver cancer proliferation. Acta biochimica et biophysica Sinica, 55(9), 1370.