

Resource Summary Report

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

pET22b_EcSSB_1

RRID:Addgene_78203

Type: Plasmid

Proper Citation

RRID:Addgene_78203

Plasmid Information

URL: <http://www.addgene.org/78203>

Proper Citation: RRID:Addgene_78203

Insert Name: ssb (G26C)

Organism: E. coli

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:18599625](#)

Vector Backbone Description: Vector Backbone:pET22b; Vector Types:Bacterial Expression; Bacterial Resistance:Ampicillin

Comments: Please note: The numbering system used was for the mature natural wild-type ssb protein. The N-terminal methionine is quantitatively cleaved off in E. coli and was not numbered so all mutations will be off by 1 nucleotide (e.g., G27C = G26C). The expressed protein is a single-cysteine variant of E. coli single-stranded DNA-binding protein, EcSSB, for subsequent labeling at the 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 ~6-fold fluorescence increase on binding ssDNA with very high affinity.

Plasmid Name: pET22b_EcSSB_1

Relevant Mutation: G26C (please see depositor comment below)

Record Creation Time: 20220422T222515+0000

Record Last Update: 20260815T082022+0000

Ratings and Alerts

No rating or validation information has been found for pET22b_EcSSB_1.

No alerts have been found for pET22b_EcSSB_1.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.