

Resource Summary Report

Generated by [RRID](#) on Aug 18, 2026

pcDNA5-FRT-TO-Nsp13-HF_GC3opt

RRID:Addgene_157716

Type: Plasmid

Proper Citation

RRID:Addgene_157716

Plasmid Information

URL: <http://www.addgene.org/157716>

Proper Citation: RRID:Addgene_157716

Insert Name: Nsp13-HF_GC3opt

Organism: SARS-CoV-2

Bacterial Resistance: Ampicillin

Defining Citation: [PMID:33313418](#)

Vector Backbone Description: Backbone Marker:Thermo Fisher; Vector Backbone:pcDNA5-FRT-TO; Vector Types:Mammalian Expression; Bacterial Resistance:Ampicillin

Plasmid Name: pcDNA5-FRT-TO-Nsp13-HF_GC3opt

Relevant Mutation: codon optimized; gene expression was optimized by increasing the GC3 content within codons

Record Creation Time: 20220422T221854+0000

Record Last Update: 20260815T080808+0000

Ratings and Alerts

No rating or validation information has been found for pcDNA5-FRT-TO-Nsp13-HF_GC3opt.

No alerts have been found for pcDNA5-FRT-TO-Nsp13-HF_GC3opt.

Data and Source Information

Source: [Addgene](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.