

# Resource Summary Report

Generated by [RRID](#) on Aug 17, 2026

## pcDNA-FRT-TO-Nprot\_GC3opt

RRID:Addgene\_157730

Type: Plasmid

### Proper Citation

RRID:Addgene\_157730

### Plasmid Information

**URL:** <http://www.addgene.org/157730>

**Proper Citation:** RRID:Addgene\_157730

**Insert Name:** Nprot\_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:** pcDNA-FRT-TO-Nprot\_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 pcDNA-FRT-TO-Nprot\_GC3opt.

No alerts have been found for pcDNA-FRT-TO-Nprot\_GC3opt.

### Data and Source Information

**Source:** [Addgene](#)

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## Usage and Citation Metrics

We have not found any literature mentions for this resource.