pGreenTIR

87572™

Description

This is a green fluorescent protein (GFP) cloning vector designed specifically for use in the construction of prokaryotic transcriptional fusions. The gfp gene, along with the translation initiation region (TIR) can be excised with one of eight restriction enzymes (HindIII, PstI, SalI, XbaI, BamHI, SmaI, SacI or EcoRI). The gfp allele in pGreenTIR contains both the F64L and S65T mutations that increase protein solubility and cause a ?red-shift? in the excitation maximum from 395 to 490 nm. The vector was constructed by cloning a mutant GFP gene into the EcoRI site of pUC1813. The resulting construct was mutagenized via PCR to 1) restore the 5? end of the gene to wild-type, 2) incorporate an upstream translational enhancer and 3) change the Shine-Delgarno region (and surrounding bp) to consensus.

----Gene 191: 149-153, 1997

Clone type: Vector

Shipping information: *Escherichia coli* containing the plasmid in glycerol stock

Storage Conditions

Product format: Frozen

Storage conditions: -80°C or colder

Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at www.atcc.org.

Vector Information

Construct size (kb): 3.483999967575073
Vector name: pGreenTIR (plasmid)
Construction: pUC1813
Coding sequence: gfp
Enhancer: from the phage T7 gene10
Markers: ampR
MCS: EcoRI...HindIII; HindIII...EcoRI
Operator: lac
Promoters: lac
Replicon: pMB1
Ribosome-binding site: Shine-Dalgarno sequence
Translational enhancer: from the phage T7 gene10

Growth Conditions

Medium:
ATCC Medium 1227: LB Medium (ATCC medium 1065) with 50 mcg/ml ampicillin
Temperature: 37°C

Notes

Restriction digests of the clone gave the following sizes (in kb): EcoRI 2.6, 0.75; KpnI 3.5. ATCC Staff

Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: pGreenTIR (ATCC 87572)

References

References and other information relating to this material are available at www.atcc.org.

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Revision

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