



# 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

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### Storage Conditions

**Product format:** Frozen

**Storage conditions:** -80°C or colder

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### 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.

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**BSL 1**

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## Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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## 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

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## Growth Conditions

**Medium:**

ATCC Medium 1227: LB Medium (ATCC medium 1065) with 50 mcg/ml ampicillin

**Temperature:** 37°C

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## Notes

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

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## Material Citation

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

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## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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