



AVIDITY, L.L.C.

Green Fluorescent Protein

from *Renilla reniformis*

Biotinylated Avitag™ fusion (C'terminus)

rrGFP-100

Specifications

Green Fluorescent Protein of *Renilla reniformis* was genetically engineered to be produced in *E.coli* and to contain the Avitag peptide sequence (GLNDIFEAQKIEWHE). The Avitag peptide has been efficiently biotinylated by the *E.coli* enzyme, biotin ligase. Biotin ligase covalently attaches 1 biotin molecule to the lysine within Avitag (MW 29,525 daltons).

The Green Fluorescent Protein of *Renilla reniformis* has a diverse range of uses in cell biology, drug discovery, biomedical research, high throughput screening (HTS) and fluorescence activated cell sorting (FACS). Fluorescent proteins expressed in living cells (e.g. fungi, bacteria, animals and plants) can be used to study molecular processes in real time such as dynamics of nuclear division, protein trafficking, etc. GFPs can also be used for the dynamic monitoring of protein interactions using FRET or BRET technologies.

Source: *Renilla reniformis*

Storage buffer: 10mM Na₂HPO₄, 140mM NaCl, 2mM KH₂PO₄, 3mM KCl, 20% glycerol pH 7.6.

Storage conditions: The enzyme arrives on dry ice (or, in some cases, ice bricks) and should be immediately stored at -80°C. Protein can be quickly thawed and placed at 4°C. Avoid repeated freezing and thawing of protein.

Concentration: 2.0 mg/mL by A₂₈₀. 100µg

Purity: >98% by Coomassie staining.

Activity: Ratio 495nm/280nm = 3.7. Fluorescence measurements are dependent on individual fluorometer and must be determined by the user.