

Green fluorescent protein CopGFP

- Bright green fluorescence
- Extra fast maturation at a wide range of temperatures

Description

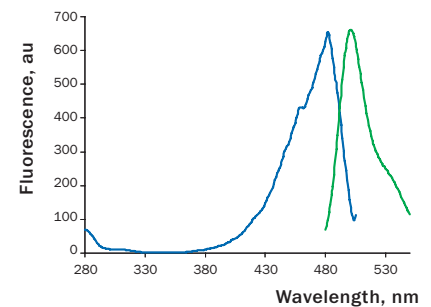
CopGFP (ppluGFP2 in our scientific publications, Shagin *et al.*, 2004) is a green fluorescent protein cloned from copepod *Pontellina plumata* (Arthropoda; Crustacea; Maxillopoda; Copepoda). CopGFP is characterized by superbright green fluorescence (excitation/ emission max = 482/ 502 nm) and fast maturation rate at a wide range of temperatures.

CopGFP demonstrates successful performance when expressed in cold-blooded animals, however exhibits a tendency to form aggregates in mammalian cells especially in long-term cultures.

Main properties of CopGFP

| Characteristic | |
|------------------------|---|
| Molecular weight | 26 kDa |
| Fluorescence color | green |
| Excitation max | 482 nm |
| Emission max | 502 nm |
| Quantum yield | 0.60 |
| Extinction coefficient | 70 000 M ⁻¹ cm ⁻¹ |
| Brightness* | 42.0 |
| pKa | 4.3 |
| Structure | tetramer |
| Aggregation | yes |
| Maturation at 37°C | super fast |
| Photostability | high |

*Brightness is a product of extinction coefficient and quantum yield, divided by 1000.



CopGFP normalized excitation (thin line) and emission (thick line) spectra.

Recommended filter sets and antibodies

CopGFP can be detected using common fluorescence filter sets for EGFP, FITC, and other green dyes. Recommended Omega Optical filter sets are QMAX-Green, XF100-2, XF100-3, XF115-2, and XF116-2.

Antibodies against CopGFP (Cat.# AB501, AB502, AB513, AB514) are available from Evrogen.

References

Shagin *et al.* (2004) *Mol. Biol. Evol.* 21(5): 841-850.

Available CopGFP-related products

| Product | Cat.# | Description | Size |
|----------------------------------|-------|--|--------|
| Antibodies against CopGFP | | | |
| Anti-CopGFP antibody | AB501 | Rabbit polyclonal antibody against non-denatured | 100 µg |
| | AB502 | CopGFP | 200 µg |
| Anti-CopGFP (d) antibody | AB513 | Rabbit polyclonal antibody against denatured | 100 µg |
| | AB514 | CopGFP and TurboGFP | 200 µg |

Please contact your local distributor for exact prices and delivery information.

Notice to Purchaser:

CopGFP-related products: These products are intended for research use only and covered by Evrogen Patents and/or Patent applications pending. By use of these products, you accept the terms and conditions of the applicable Limited Use Label License (available at www.evrogen.com/Evrogen-FP-license.shtml).