# Recombinant Full Lenght Aequorea victoria Enhanced GFP Protein, His tagged

**Cat. No.** EGFP-08 **Lot. No.** (See product label)

## SPECIFICATION

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| **Product Overview** | The enhanced GFP protein (enhanced green fluorescent protein, EGFP) is a recombinant mutant of wild-type GFP (wtGFP). The protein is the full-length EGFP (aa 1-239). It has an excitation and emission spectra of 488/509nm, allowing its detection under fluorescent microscopy and flow cytometry. It also has a 7 × His-tag on N-terminus. Thus, both anti-EGFP and anti-His tag antibodies can detect the protein on Western Blot assay. The recombinant enhanced green fluorescent protein (EGFP) is expressed by our unique SoluPrx technology, which avoids in vitro refolding process. Overall, the recombinant EGFP Protein is an ideal standard for SDS gels, Western Blots, and fluorometry. |
| **Species** | Aequorea victoria |
| **Source** | E.coli |
| **ProteinLength** | 1-239 aa |
| **Description** | The wtGFP protein from A. Victoria has 238 amino acid residues. It has a major excitation peak at 395 nm and a minor one at 475 nm. Its emission peak is at 509 nm. The cloned or synthetic GFP gene can express in many types of cells. GFP has also been added to plants, fishes, mice, rats, frogs, flies, worms, and other living organisms. Since GFP does not require substrates or cofactors to form chromophore, it is a valuable reporter for tracing gene expression. Protein engineering methods have created a vast number of GFP mutants with desired excitation or emission |

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| | spectra. Currently, the GFP variants can have blue (EBFP, EBFP2), cyan (ECFP), or yellow (YFP) fluorescence. Due to the fast folding feature, GFP and its mutants have become a favorable fluorescent tag for making fusion proteins. They can function as a reporter of a gene expression. In addition, GFP mutants are good cell lineage tracers. They can also measure protein-protein interactions. Moreover, GFP proteins are great biosensors. |
| **Form** | Liquid |
| **Excitation/emission** | 488/509 nm |
| **Molecular Mass** | 28.3 kDa |
| **AA Sequence** | MVSKGEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLKFICTTGKLPVP WPTLVTTLTYGVQCFSRYPDHMKQHDFFKSAMPEGYVQERTIFFKDDGNYKTRAEV KFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNSHNVYIMADKQKNGIKVNFKIRHNI EDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALSKDPNEKRDHMVLLEFVTAA GITLGMDELYK |
| **Purity** | ≥ 95% by SDS-PAGE |
| **Applications** | In vitro research use only |
| **Storage** | Short Term Storage: -20 centigrade Long Term Storage: -20 centigrade Avoid freeze/thaw cycle. Aliquot upon arrival. |
| **Storage Buffer** | 10 mM PBS buffer, 50% glycerol, pH7.2 |
| **Concentration** | 0.5-1.0 mg/mL |
| **Shipping** | Cold packs |

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## GENE INFORMATION

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| **Synonyms** | EGFP; enhanced green fluorescent protein |

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