

## Recombinant Aequorea Victoria EGFP, His-tagged

Cat. No. EGFP-111A Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Aequorea Victoria EGFP, fused with his tag, was expressed in E. coli.

**Species** Aequorea victoria

**Source** E.coli

#### Description

**FUNCTION:** Energy-transfer acceptor. Its role is to transduce the blue chemiluminescence of the protein aequorin into green fluorescent light by energy transfer. Fluoresces in vivo upon receiving energy from the Ca(2+)-activated photoprotein aequorin. **BIOPHYSICOCHEMICAL PROPERTIES:** Excitation max (nm): 488; Emission max (nm): 509; Extinction coefficient (Cm-1M-1): 61000. **SUBUNIT:** Monomer. **TISSUE SPECIFICITY:** Photocytes. **PTM:** Contains a chromophore consisting of modified amino acid residues. The chromophore is formed by autocatalytic backbone condensation between Xaa-N and Gly-(N+2), and oxidation of Tyr-(N+1) to didehydrotyrosine. Maturation of the chromophore requires nothing other than molecular oxygen. **BIOTECHNOLOGY:** Fluorescent proteins have become a useful and ubiquitous tool for making chimeric proteins, where they function as a fluorescent protein tag. Typically they tolerate N- and C-terminal fusion to a broad variety of proteins. They have been expressed in most known cell types and are used as a noninvasive fluorescent marker in living cells and organisms. They enable a wide range of applications where they have functioned as a cell lineage tracer, reporter of gene expression, or as a measure of protein-protein interactions. **SIMILARITY:** Belongs to the GFP family.

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<b>Form</b>	Lyophilised
<b>Molecular Mass</b>	~30 kDa
<b>AA Sequence</b>	Histidine-V5 epitope fused to EGFP MRGSHHHHHHGMASMTGGQQMGRDLYDDD DKDHPFTVSK GEELFTGVVPILVELDGDVNGHKFSVSGEGEGDATYGKLTLLK MVLL EFVTAAGITLGMDELYK
<b>Purity</b>	92% by SDS-PAGE
<b>Storage</b>	After reconstitution, aliquot and keep at -20°C for long-term storage; for short term keep at 4°C.
<b>Reconstitution</b>	Reconstitute in 100 µl of sterile water. Centrifuge to remove any insoluble material.

## GENE INFORMATION

<b>Gene Name</b>	EGFP protein
<b>Official Symbol</b>	EGFP
<b>Synonyms</b>	EGFP; Enhanced Green Fluorescent Protein

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