# abcam

# Product datasheet

# Recombinant A. victoria GFP protein ab84191

★★★★★ 3 Abreviews 7 References 画像数 2

### 製品の詳細

製品名 Recombinant A. victoria GFP protein

精製度 > 95 % SDS-PAGE.

Purified using conventional chromatography techniques.

**エンドトキシン・レベル** < 1.000 Eu/μg

**発現系** Escherichia coli

アクセッション番号 <u>P42212</u>

タンパク質長 Full length protein

Animal free No

由来 Recombinant

生物種 Aequorea victoria

配列 MSKGEELFTG VVPILVELDG DVNGHKFSVS

GEGEGDATYG KLTLKFICTT GKLPVPWPTL
VTTFSYGVQC FSRYPDHMKQ HDFFKSAMPE
GYVQERTIFF KDDGNYKTRA EVKFEGDTLV
NRIELKGIDF KEDGNILGHK LEYNYNSHNV
YIMADKQKNG IKVNFKIRHN IEDGSVQLAD
HYQQNTPIGD GPVLLPDNHY LSTQSALSKD
PNEKRDHMVL LEFVTAAGIT HGMDELYK

予測される分子量27 kDa領域1 to 238

配列の追加情報 (AAA27721) MW confirmed by MALDI-TOF.

製品の詳細 Recombinant A. victoria GFP protein

特性

Our Abpromise guarantee covers the use of ab84191 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション SDS-PAGE

Western blot

**Functional Studies** 

質量分析 MALDI-TOF

製品の状態 Liquid

備考 Endotoxin Level determined by LAL method.

Concentration determined by Bradford assay.

### 前処理および保存

# 保存方法および安定性

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.316% Tris HCI, 10% Glycerol

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 関連情報

## 関連性

**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<sup>2+</sup> -activated photoprotein aequorin.

Subunit structure: Monomer.

Tissue specificity: Photocytes.

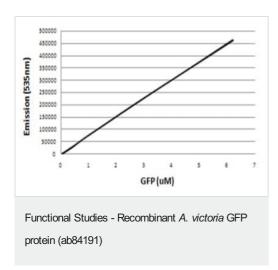
**Post-translational modification:** Contains a chromophore consisting of modified amino acid residues. The chromophore is formed by autocatalytic backbone condensation between Ser-65 and Gly-67, and oxidation of Tyr-66 to didehydrotyrosine. Maturation of the chromophore requires nothing other than molecular oxygen.

**Biotechnological use:** Green fluorescent protein has been engineered to produce a vast number of variously colored mutants, fusion proteins, and biosensors. Fluorescent proteins and its mutated allelic forms, blue, cyan and yellow 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. Can also be used as a molecular thermometer, allowing accurate temperature measurements in fluids. The measurement process relies on the detection of the blinking of GFP using fluorescence correlation spectroscopy.

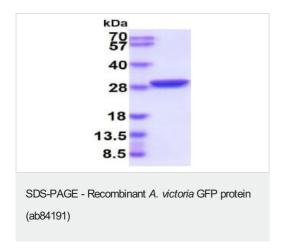
Sequence similarities: Belongs to the GFP family.

Biophysicochemical properties: Absorption: Abs(max)=395 nm

Exhibits a smaller absorbance peak at 470 nm. The fluorescence emission spectrum peaks at 509 nm with a shoulder at 540 nm.



- 1. Prepare a 150  $\mu$ l recombinant GFP with various concentrations (0.00074 nM 6.21  $\mu$ M) in assay buffer and equilibrate to 25°C. (Assay buffer: 10 mM Tris-HCI (pH 8.0), 10 mM EDTA, 0.02% sodium azide.)
- 2. Read at excitation wavelengths 485 nm and emission 535 nm.
- 96 Well Polystyrene Microplate, black
- Fluorescent plate reader



3 ug of reduced ab84191 on SDS-PAGE, stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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