abcam

Product datasheet

Recombinant Enhanced GFP protein (His tag) ab134853

5 References

製品の詳細

製品名	Recombinant Enhanced GFP protein (His tag)
精製度	> 95 % SDS-PAGE. ab134853 was expressed in E.coli as soluble protein and was purified using a Ni-NTA column.
エンドトキシン・レベル	= 5.000 Eu/µg
発現系	Escherichia coli
アクセッション番号	AF288620
タンパク質長	Full length protein
Animal free	No
由来	Recombinant
生物種	Aequorea victoria
配列	MGDIMGEWGNEIFGAIAGFLGVSKGEELFTGVVPILVELDGD VNGHKFSV SGEGEGDATYGKLT LKFICTTGKLPVPWPTLVTTLTYGVQCFSRYPDHMKQHDFFK SAMPEGYV QERTIFFKDDGNYK TRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNYNSHN VYIMADKQ KNGIKVNFKIRHNI EDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALSKDPNE KRDHMVLL EFVTAAGITLGMDE LYKSRHRRHRQRSRSRAAARRRRRRRRRHHHHHH
予測される分子量	33 kDa
領域	2 to 238
タグ	His tag C-Terminus
配列の追加情報	Second generation monomeric GFP (Enhanced GFP). Constructed with a N-terminal tag of HA2 peptide and C-terminal 9 arginine domain/His Tag.

特性

Our **Abpromise guarantee** covers the use of **ab134853** 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
製品の状態	Liquid

備考

This version of GFP is the second generation monomeric green fluorescent protein (Enhanced GFP) that has improved brightness and photostability.

This EGFP-9R, have a single excitation peak centered at about 488 nm, with an emission peak wavelength of 509 nm.

前処理および保存

保存方法および安定性

Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

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^{2+} -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.

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