

Product datasheet

Recombinant Enhanced GFP protein (His tag) ab134853

5 References

Description

Product name	Recombinant Enhanced GFP protein (His tag)		
Purity	> 95 % SDS-PAGE. ab134853 was expressed in E.coli as soluble protein and was purified using a Ni-NTA column.		
Endotoxin level	= 5.000 Eu/μg		
Expression system	Escherichia coli		
Accession	<u>AF288620</u>		
Protein length	Full length protein		
Animal free	No		
Nature	Recombinant		
Species	Aequorea victoria		
Sequence	MGDIMGEWGNEIFGAIAGFLGVSKGEELFTGVVPILVELDG DVNGHKFSV SGEGEDATYGKLT LKFICTTGKLPVPWPTLVTTLTYGVCFSRYPDHMKQHDF FKSAMPEGYV QERTIFFKDDGNYK TRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNNSH NVYIMADKQ KNGIKVNFKIRHNI EDGSVQLADHYQQNTPIGDGPVLLPDNHYSTQSALSKD PNEKRDHMLVLL EFVTAAGITLGMDE LYKSRHRRHRQSRSRRAAARRRRRRRRHHHHHH		
Predicted molecular weight	33 kDa		
Amino acids	2 to 238		
Tags	His tag C-Terminus		
Additional sequence information	Second generation monomeric GFP (Enhanced GFP). Constructed with a N-terminal tag of HA2 peptide and C-terminal 9 arginine domain/His Tag.		

Specifications

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.

Applications SDS-PAGE

Form	Liquid
Additional notes	<p>This version of GFP is the second generation monomeric green fluorescent protein (Enhanced GFP) that has improved brightness and photostability.</p> <p>This EGFP-9R, have a single excitation peak centered at about 488 nm, with an emission peak wavelength of 509 nm.</p>
Preparation and Storage	
Stability and Storage	<p>Shipped at 4°C. Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.</p> <p>Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)</p>
General Info	
Relevance	<p>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.</p> <p>Subunit structure: Monomer.</p> <p>Tissue specificity: Photocytes.</p> <p>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.</p> <p>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.</p> <p>Sequence similarities: Belongs to the GFP family.</p> <p>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.</p>

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors