FITC-Labeled Human FAP Protein, His Tag

Catalog # FAP-HF243

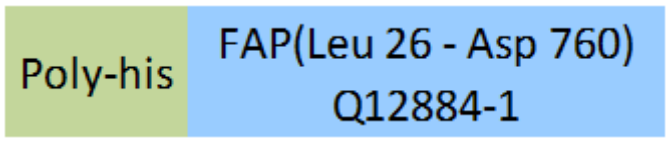
Synonym

FAP,FAPalpha,SIMP,Seprase,APCE

Source

FITC-Labeled Human FAP, His Tag (FAP-HF243) is expressed from human 293 cells (HEK293). It contains AA Leu 26 - Asp 760 (Accession # Q12884-1). It is the FITC labeled form of Human FAP, His Tag (FAP-H5244).
Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 86.9 kDa. The protein migrates as 90-100 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC

Excitation source: 488 nm spectral line, argon-ion laser

Excitation Wavelength: 488 nm

Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is ***2-4***.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

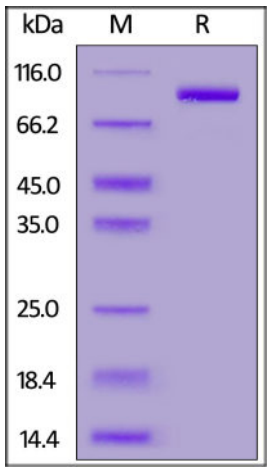
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

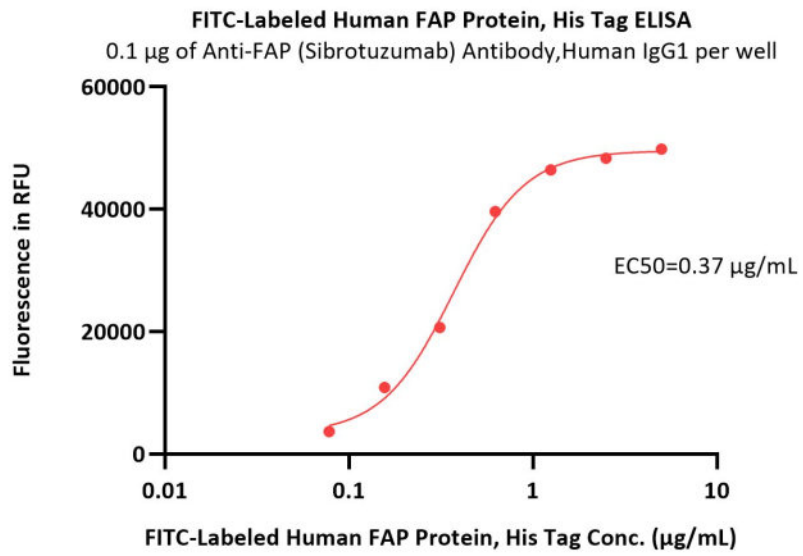
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



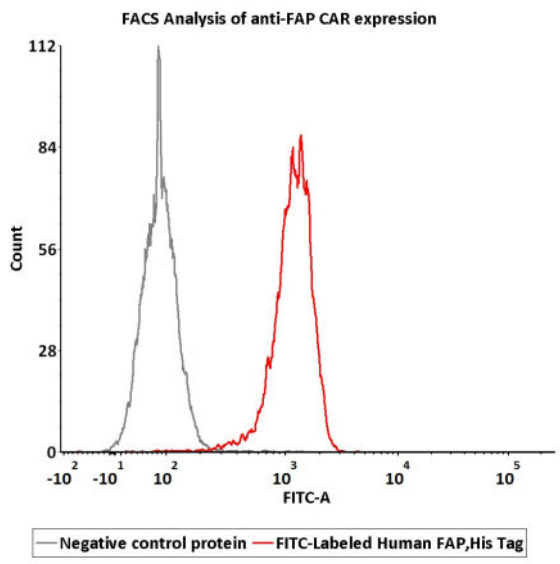
FITC-Labeled Human FAP, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Anti-FAP (Sibrotuzumab) Antibody,Human IgG1 at 1 μg/mL (100 μL/well) can bind FITC-Labeled Human FAP Protein, His Tag (Cat. No. FAP-HF243) with a linear range of 0.078-0.625 μg/mL (QC tested).

Bioactivity-FACS



2e5 of anti-FAP CAR 293 cells were stained with 100 μL of 3 μg/mL of FITC-Labeled Human FAP, His Tag (Cat. No. FAP-HF243) and negative control protein respectively, FITC signals was used to evaluate the binding activity (QC tested).

Background

FAP (also known as seprase) is a Type II transmembrane serine protease. Both plasma membrane and soluble forms exhibit post-proline cleaving endopeptidase activity, with a marked preference for Ala/Ser-Gly-Pro-Ser/Asn/Ala consensus sequences. Degrade also gelatin, heat-denatured type I collagen. Also has dipeptidyl peptidase activity, with a preference for Ala-Pro, Ile-Pro, Gly-Pro, Arg-Pro and Pro-Pro. The plasma membrane form, in association with either DPP4, PLAUR or integrins, is involved in the pericellular proteolysis of the extracellular matrix (ECM), and hence promotes cell adhesion, migration and invasion through the ECM. Promotes glioma cell invasion through the brain parenchyma by degrading the proteoglycan brevican. Acts as a tumor suppressor in melanocytic cells through regulation of cell proliferation and survival in a serine protease activity-independent manner.

Clinical and Translational Updates