

Synonym

ROBO1,DUTT1

Source

FITC-Labeled Human ROBO1, His Tag(RB1-HF2H7) is expressed from human 293 cells (HEK293). It contains AA Gln 26 - Pro 897 (Accession # [Q9Y6N7-1](#)).
Predicted N-terminus: Gln 26

Molecular Characterization

ROBO1(Gln 26 - Pro 897)
Q9Y6N7-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 97.5 kDa. The protein migrates as 110-120 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.

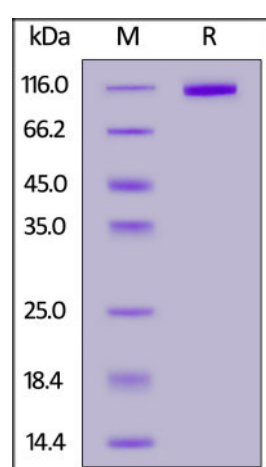
Storage

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.

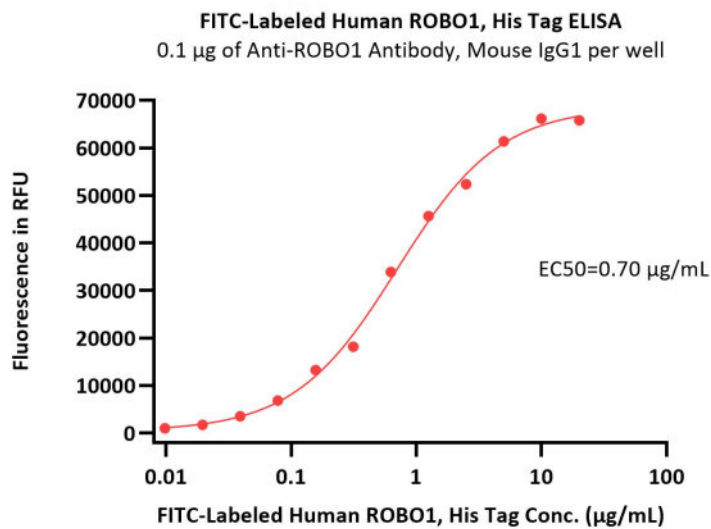
This product is stable after storage at:

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

SDS-PAGE

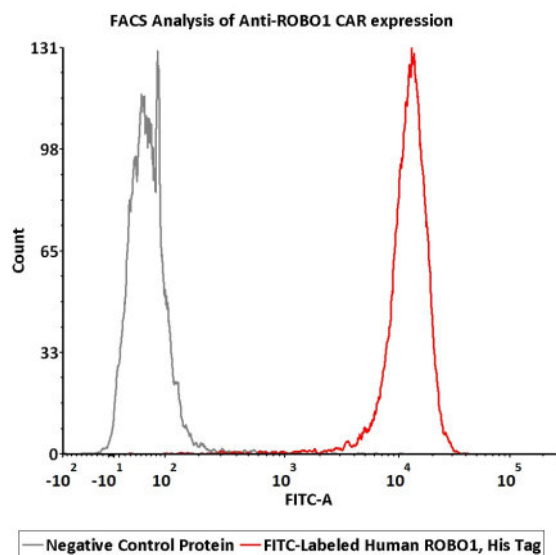
FITC-Labeled Human ROBO1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Anti-ROBO1 Antibody, Mouse IgG1 at 1 µg/mL (100 µL/well) can bind FITC-Labeled Human ROBO1, His Tag (Cat. No. RB1-HF2H7) with a linear range of 0.01-1.25 µg/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-ROBO1 CAR-293 cells were stained with 100 µL of 10 µg/mL of FITC-Labeled Human ROBO1, His Tag (Cat. No. RB1-HF2H7) and negative control protein respectively, FITC signals was used to evaluate the binding activity (QC tested).

Background

ROBO1 is a member of the ROBO immunoglobulin superfamily of proteins, and it plays a crucial role in cell motility and migration during embryogenesis and organogenesis. In addition, evidence showed that ROBO1 might drive migration and invasion in malignant cells, such as glioma and breast cancer, which might play a role in cancer aggressiveness. In contrast, some studies suggested that ROBO1 pathways play a key role in tumors by acting as a tumor suppressor, especially in cell invasion.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.

