

Synonym

FOLH1,PSMA,GIG27,FOLH,NAALAD1,PSM,NAALADase I,GCPII,FGCP

Source

PE-Labeled Human PSMA, His Tag (PSA-HP2Q3) is produced via site-specific conjugation of PE to Human PSMA, His Tag under optimal conditions with a proprietary technology with a proprietary technology. Human PSMA, His Tag is expressed from human 293 cells (HEK293). It contains AA Lys 44 - Ala 750 (Accession # Q04609-1).

Predicted N-terminus: His

Molecular Characterization

Poly-his

PSMA(Lys 44 - Ala 750) Q04609-1

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

The protein has a calculated MW of 83.1 kDa.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Application

Evaluation of anti-PSMA CAR expression by flow cytometry. Please note that this product is NOT compatible to streptavidin detection system.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.5% BSA, 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

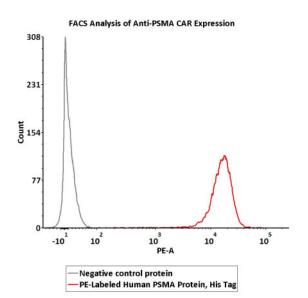
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

Bioactivity-FACS



5e5 of anti-PSMA CAR-293 cells were stained with 100 μ L of 1:50 dilution (2 μ L stock solution in 100 μ L FACS buffer) of PE-Labeled Human PSMA, His Tag (Cat. No. PSA-HP2Q3) and negative control protein respectively. PE signal was used to evaluate the binding activity (QC tested).



PE-Labeled Human PSMA / FOLH1 Protein, His Tag (Site-specific conjugation)

Catalog # PSA-HP2Q3



Background

Prostate-specific membrane antigen (PSMA) is also known as Folate hydrolase 1 (FOLH1), Glutamate carboxypeptidase 2 (GCP2), N-acetylated-alpha-linked acidic dipeptidase I (NAALAD1), which belongs to the peptidase M28 family and M28B subfamily. FOLH1 / PSMA is stable at pH greater than 6.5. FOLH1 / PSMA is a type II transmembrane zinc metallopeptidase that is most highly expressed in the nervous system, prostate, kidney, and small intestine. FOLH1 / GCP-2 is homodimer and binds 2 zinc ions per subunit, and required for NAALADase activity. The catalytic activity of PSMA involved in releasing of an unsubstituted, C-terminal glutamyl residue, typically from Ac-Asp-Glu or folylpoly – gamma - glutamates. FOLH1 / GCP-2 / PSMA has both folate hydrolase and N – acetylated – alpha – linked - acidic dipeptidase (NAALADase) activity and has a preference for tri-alpha-glutamate peptides. GCP-2 / PSMA involved in prostate tumor progression and also exhibits a dipeptidyl-peptidase IV type activity. In vitro, cleaves Gly-Pro-AMC.

Clinical and Translational Updates

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

