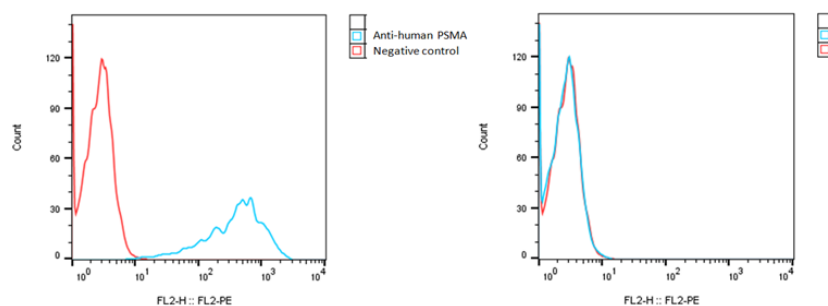


SPECIFICATIONS

Catalog Number	C3109
Cell Line Name	Human PSMA B16/F1 Stable Cell Line
Lot Number	22025
Accession Number	NP_004467.1
Host Cell	Adherent B16/F1
Quantity	Two vials of frozen cells (2x10 ⁶ cells per vial)
Culture Medium	DMEM with 10% FBS, 10µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of human PSMA expression on human PSMA-B16/F1 stable cell line (A) and untransfected B16/F1 cells (B) using a PE conjugated monoclonal antibody specific for human PSMA ((BioLegend, #342503)


BACKGROUND

Prostate-Specific Membrane Antigen (PSMA), also known as FOLH1, FOLH, FGCP, GCP2, GCPII, mGCP, PSM, and NAALAD1, is a type II transmembrane glycoprotein that acts as a glutamate-preferring carboxypeptidase. It functions as a folate hydrolase by metabolizing folate compounds and is also responsible for the internalization and degradation of folate derivatives, including vitamin B9. Additionally, PSMA has been implicated in neuropeptide processing and angiogenesis. Human PSMA is highly expressed in the prostate, around a hundred times greater than in most other tissues. In prostate cancer cells, PSMA expression is highly elevated and its enzymatic activity is significantly upregulated. In some prostate cancers, PSMA is the second-most upregulated gene product, with an 8- to 12-fold increase over levels in noncancerous prostate cells. This overexpression, coupled with its high specificity to prostate tissues, makes it an attractive target for development of cancer biomarker and therapeutics.

References

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