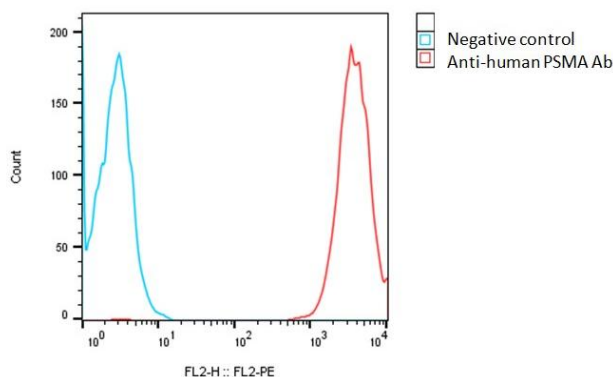


**SPECIFICATIONS**

<b>Catalog Number</b>	C3006
<b>Cell Line Name</b>	Human PSMA-CHO-K1 stable cell line
<b>Accession Number</b>	NP_004467.1
<b>Host Cell</b>	Adherent CHO-K1
<b>Quantity</b>	Two vials of frozen cells (2x10 <sup>6</sup> per vial)
<b>Culture Medium</b>	DMEM with 10% FBS, 4µg/ml puromycin
<b>Freezing Medium</b>	90% FBS and 10% DMSO
<b>Storage</b>	Liquid nitrogen

**DATA**

Detection of human PSMA expression on human PSMA-CHO-K1 stable cells using a monoclonal antibody specific for human PSMA (BioLegend, #342503)


**BACKGROUND**

Prostate-Specific Membrane Antigen (PSMA), also known as FOLH, GCP2, 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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