

Human PSMA/FOLH1 Protein (active dimer)

Cat. No. PSM-HM110



Description

Source	Recombinant Human PSMA/FOLH1 Protein is expressed from HEK293 with His tag at the N-Terminus.
	It contains Lys44-Ala750.
Accession	Q04609-1
Molecular Weight	The protein has a predicted MW of 80.6 kDa. Due to glycosylation, the protein migrates to 90-110 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per µg by the LAL method.
Purity	> 90% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

Formulation	Lyophilized from 0.22µm filtered solution in 50mM MES, 150mM NaCl, 8% trehalose (pH 6.0).
Reconstitution	Dissolve the lyophilized protein in 50mM MES, 150mM NaCl (pH 6.0). Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

Prostate-specific membrane antigen (PSMA) is an enzyme that in humans is encoded by the FOLH1 (folate hydrolase 1) gene, also known as Glutamate carboxypeptidase II (GCPII). Human PSMA is highly expressed in the prostate, roughly a hundred times greater than in most other tissues. 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.

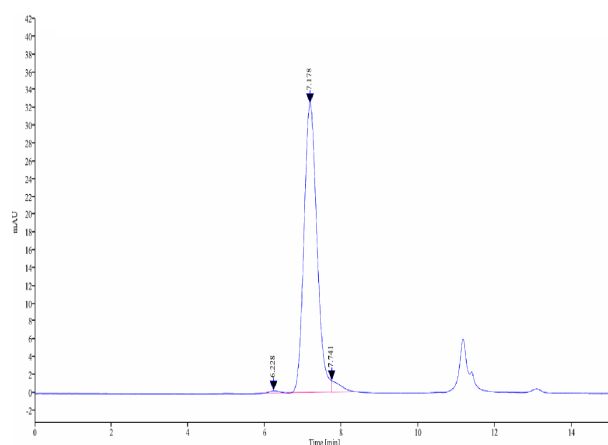
Assay Data

Bis-Tris PAGE



Human PSMA on Bis-Tris PAGE under reduced condition. The purity is greater than 90%.

SEC-HPLC



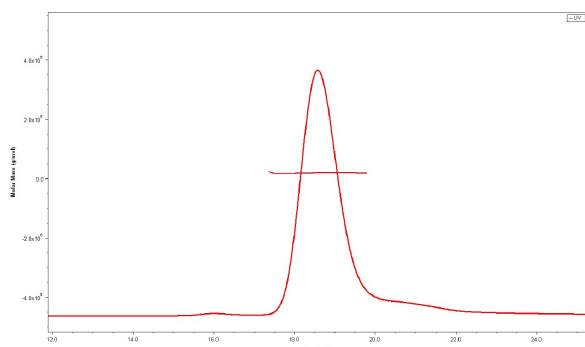
The purity of Human PSMA is greater than 95% as determined by SEC-HPLC.

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Assay Data

SEC-MALS

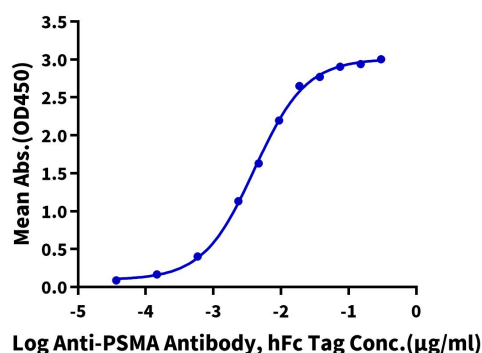


The purity of Human PSMA is greater than 95% and the molecular weight of this protein is around 170-220 kDa as determined by SEC-MALS.

ELISA Data

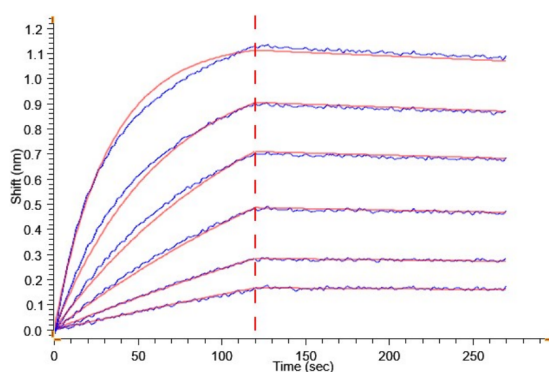
Human PSMA, His Tag ELISA

0.2µg Human PSMA, His Tag Per Well



Immobilized Human PSMA, His Tag at 2µg/ml (100µl/Well) on the plate. Dose response curve for Anti-PSMA Antibody, hFc Tag with the EC₅₀ of 4.1ng/ml determined by ELISA.

BLI Data



Loaded Anti-PSMA Ab., hFc Tag on ProA-Biosensor can bind Human PSMA, His Tag with an affinity constant of 1.74 nM as determined in BLI assay (Gator® Prime).

Bioactivity Data

Measured by its ability to hydrolyze the substrate N-acetyl-L-Asp-L-Glu into N-acetyl-L-Asp and L-Glu. The L-Glu product is measured by fluorescence after its derivatization by ortho-phthalaldehyde. The specific activity is >400 pmol/min/µg.