

## PSMA Protein, Human (HEK293, His, solution)

<b>Cat. No.:</b>	HY-P70548
<b>Synonyms:</b>	Glutamate carboxypeptidase 2; FGCP; GCPII; mGCP; NAALADase I; PSMA; Cell growth-inhibiting gene 27 protein; Folate hydrolase 1
<b>Species:</b>	Human
<b>Source:</b>	HEK293
<b>Accession:</b>	Q04609-1 (K44-A750)
<b>Gene ID:</b>	2346
<b>Molecular Weight:</b>	90-120 kDa

### PROPERTIES

#### AA Sequence

K S S N E A T N I T	P K H N M K A F L D	E L K A E N I K K F	L Y N F T Q I P H L
A G T E Q N F Q L A	K Q I Q S Q W K E F	G L D S V E L A H Y	D V L L S Y P N K T
H P N Y I S I I N E	D G N E I F N T S L	F E P P P P G Y E N	V S D I V P P F S A
F S P Q G M P E G D	L V Y V N Y A R T E	D F F K L E R D M K	I N C S G K I V I A
R Y G K V F R G N K	V K N A Q L A G A K	G V I L Y S D P A D	Y F A P G V K S Y P
D G W N L P G G G V	Q R G N I L N L N G	A G D P L T P G Y P	A N E Y A Y R R G I
A E A V G L P S I P	V H P I G Y Y D A Q	K L L E K M G G S A	P P D S S W R G S L
K V P Y N V G P G F	T G N F S T Q K V K	M H I H S T N E V T	R I Y N V I G T L R
G A V E P D R Y V I	L G G H R D S W V F	G G I D P Q S G A A	V V H E I V R S F G
T L K K E G W R P R	R T I L F A S W D A	E E F G L L G S T E	W A E E N S R L L Q
E R G V A Y I N A D	S S I E G N Y T L R	V D C T P L M Y S L	V H N L T K E L K S
P D E G F E G K S L	Y E S W T K K S P S	P E F S G M P R I S	K L G S G N D F E V
F F Q R L G I A S G	R A R Y T K N W E T	N K F S G Y P L Y H	S V Y E T Y E L V E
K F Y D P M F K Y H	L T V A Q V R G G M	V F E L A N S I V L	P F D C R D Y A V V
L R K Y A D K I Y S	I S M K H P Q E M K	T Y S V S F D S L F	S A V K N F T E I A
S K F S E R L Q D F	D K S N P I V L R M	M N D Q L M F L E R	A F I D P L G L P D
R P F Y R H V I Y A	P S S H N K Y A G E	S F P G I Y D A L F	D I E S K V D P S K
A W G E V K R Q I Y	V A A F T V Q A A A	E T L S E V A	

**Biological Activity** The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

**Appearance** Solution.

**Formulation** Supplied as a 0.2 µm filtered solution of 20 mM MES, 150 mM NaCl, 5% Trehalose, pH 5.5.

**Endotoxin Level** <1 EU/µg, determined by LAL method.

**Reconstitution** N/A

**Storage & Stability** Stored at -80°C for 1 year from date of receipt. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

**Shipping**

Shipping with dry ice

**DESCRIPTION****Background**

PSMA, a multifaceted enzyme, showcases both folate hydrolase and N-acetylated-alpha-linked-acidic dipeptidase (NAALADase) activities, displaying a notable preference for tri-alpha-glutamate peptides. It plays a crucial role in the intestinal uptake of folate, contributing to essential metabolic processes. Within the brain, PSMA acts as a modulator of excitatory neurotransmission by hydrolyzing the neuropeptide N-acetylaspartylglutamate (NAAG), leading to the release of glutamate. Notably, PSMA's involvement in prostate tumor progression highlights its potential significance in cancer biology. Additionally, the enzyme exhibits dipeptidyl-peptidase IV type activity and effectively cleaves Gly-Pro-AMC in vitro, further emphasizing its diverse enzymatic functions.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite F, Monmouth Junction, NJ 08852, USA