

## Carboxypeptidase B2/CPB2 Protein, Rat (HEK293, His)

<b>Cat. No.:</b>	HY-P75449
<b>Synonyms:</b>	Carboxypeptidase B2; CPU; pCPB; TAFI; CPB2
<b>Species:</b>	Rat
<b>Source:</b>	HEK293
<b>Accession:</b>	Q9EQV9 (F22-S422)
<b>Gene ID:</b>	113936
<b>Molecular Weight:</b>	Approximately 55-75 kDa due to the glycosylation.

### PROPERTIES

<b>AA Sequence</b>	<pre> F Q S G H V L S A L   P R T S R Q V Q L L   Q N L T T T Y E V V   L W Q P V T A E F I E K K K E V H F F V   N A S D V N S V K A   Y L N A S R I P F N   V L M N N V E D L I Q Q Q T S N D T V S   P R A S S S Y Y E Q   Y H S L N E I Y S W   I E V I T E Q H P D M L Q K I Y I G S S   Y E K Y P L Y V L K   V S G K E H R V K N   A I W I D C G I H A R E W I S P A F C L   W F I G Y V T Q F H   G K E N T Y T R L L   R H V D F Y I M P V M N V D G Y D Y T W   K K N R M W R K N R   S V H M N N R C V G   T D L N R N F A S K H W C E K G A S S F   S C S E T Y C G L Y   P E S E P E V K A V   A D F L R R N I N H I K A Y I S M H S Y   S Q Q I L F P Y S Y   N R S K S K D H E E   L S L V A S E A V R A I E S I N K N T R   Y T H G S G S E S L   Y L A P G G S D D W   I Y D L G I K Y S F T I E L R D T G R Y   G F L L P E R F I K   P T C A E A L A A V   S K I A W H V I R N S </pre>
<b>Biological Activity</b>	Specific activity is determined by a kinetic assay using Hippuryl-L-Arginine as substrate. One unit equals one micromole of Hippuryl-L-Arginine hydrolyzed per minute. Specific activity is reported in Units per milligram. This experiment requires the use of 1 mM substrate and incubation at room temperature for 30 minutes. The specific activity is 14 U/mg.
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O.
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years from date of receipt. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

## DESCRIPTION

### Background

CaCarboxypeptidase B2 (CPB2) plays a critical role in physiological regulation, particularly within the circulatory system. The enzyme exhibits specificity in cleaving C-terminal arginine or lysine residues from biologically active peptides, including kinins and anaphylatoxins, thereby finely tuning their activities and downstream signaling in the circulation. Additionally, CPB2 is instrumental in the down-regulation of fibrinolysis by selectively removing C-terminal lysine residues from fibrin that has undergone partial degradation by plasmin. This dual functionality underscores CPB2's pivotal role in maintaining the balance of peptide activities and coagulation processes, emphasizing its significance in orchestrating intricate regulatory mechanisms within the physiological context.

**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 Q, Monmouth Junction, NJ 08852, USA