

Carboxypeptidase B2/CPB2 Protein, Human (HEK293, His)

| | |
|--------------------------|--|
| Cat. No.: | HY-P7735 |
| Synonyms: | rHuCarboxypeptidase B2, His; Carboxypeptidase B2; Carboxypeptidase U; Plasma Carboxypeptidase B; Thrombin-Activable Fibrinolysis Inhibitor; CPB2 |
| Species: | Human |
| Source: | HEK293 |
| Accession: | Q96IY4 (F23-V423) |
| Gene ID: | 1361 |
| Molecular Weight: | Approximately 58.0 kDa |

PROPERTIES

| | |
|--------------------------------|--|
| AA Sequence | <pre> F Q S G Q V L A A L P R T S R Q V Q V L Q N L T T T Y E I V L W Q P V T A D L I V K K K Q V H F F V N A S D V D N V K A H L N V S G I P C S V L L A D V E D L I Q Q Q I S N D T V S P R A S A S Y Y E Q Y H S L N E I Y S W I E F I T E R H P D M L T K I H I G S S F E K Y P L Y V L K V S G K E Q A A 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 H I T Q F Y G I I G Q Y T N L L R L V D F Y V M P V V N V D G Y D Y S W K K N R M W R K N R S F Y A N N H C I G T D L N R N F A S K H W C E E G A S S S S C S E T Y C G L Y P E S E P E V K A V A S F L R R N I N Q I K A Y I S M H S Y S Q H I V F P Y S Y T R S K S K D H E E L S L V A S E A V R A I E K I S K N T R Y T H G H G S E T L Y L A P G G G D D W I Y D L G I K Y S F T I E L R D T G T Y G F L L P E R Y I K P T C R E A F A A V S K I A W H V I R N V H H H H H H </pre> |
| 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 filter solution of 20 mM Tris-HCl, 150 mM NaCl, 1 mM ZnCl ₂ , 10% Glycerol, pH 7.5. |
| Endotoxin Level | <1 EU/µg, determined by LAL method. |
| Reconstitution | N/A |
| Storage & Stability | Stored at -80°C for 1 year. 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

Carboxypeptidase B2 is a secreted glycoprotein member of the peptidase M14 family of enzymes. It is expressed by hepatocytes and platelets, with MW differences attributable to glycosylation. CPB2 can be cleaved by thrombin and plasmin, generating a relatively insoluble nonglycosylated enzymatically active fragment (TAF1a). Active CPB2 removes C-terminal Lys residues from fibrin, thereby interrupting plasmin generation and promoting fibrin polymerization. Human CPB2 proprecursor is 401 amino acids (aa) in length. It contains a prosequence (aa 23-114) and an active fragment (aa 115-423) that acts on C-terminal Lys or Arg residues^{[1][2]}.

REFERENCES

[1]. D Leenaerts, et al. Carboxypeptidase U (CPU, carboxypeptidase B2, activated thrombin-activatable fibrinolysis inhibitor) inhibition stimulates the fibrinolytic rate in different in vitro models. *J Thromb Haemost.* 2018 Oct;16(10):2057-2069.

[2]. D Leenaerts, et al. Plasma levels of carboxypeptidase U (CPU, CPB2 or TAF1a) are elevated in patients with acute myocardial infarction. *J Thromb Haemost.* 2015 Dec;13(12):2227-32.

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

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