

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Carboxypeptidase B1/CPB1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) CPA1, rhCPA2, rhCPE, recombinant mouse (rm) CPA4, and rmCPB1 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 438806
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Carboxypeptidase B1/CPB1 His16-Tyr417 Accession # P15086
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Human Carboxypeptidase B1/CPB1 (Catalog # 2897-ZN)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Carboxypeptidase B1/CPB1 (Catalog # 2897-ZN), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Carboxypeptidase B1, encoded by the CPB1 gene, specifically cleaves the C-terminal Arg and Lys residues with a preference for Arg (1). Expressed mainly in pancreas, CPB1 is a useful serum marker for acute pancreatitis (2). The deduced amino acid (aa) sequence of human CPB1 consists of a signal peptide (aa 1-15), a pro region (aa 16-110), and a mature chain (aa 111-417). Human CPB1 shares 98%, 84%, 76%, 75%, and 84% aa sequence identity with chimpanzee, dog, rat, mouse and chicken CPB1, respectively.

References:

1. Aviles, F.X. and J. Vendrell (2004) in *Handbook of Proteolytic Enzymes* (ed. Barrett, A.J. *et al.*) p. 831, Academic Press, San Diego.
2. Yamamoto, K.K. *et al.* (1992) *J. Biol. Chem.* **267**:2575.