

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Carboxypeptidase A2/CPA2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) CPA1, rhCPA4, rhCPB1, or rhCPE is observed. Recognizes the pro form (aa 17-417), but not the activated enzyme (aa 113-417) in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 384023
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Carboxypeptidase A2/CPA2 Leu18-His417 Accession # P48052
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 A2/CPA2 (Catalog # 2896-ZN)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Carboxypeptidase A2/CPA2 (Catalog # 2896-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 A2 encoded by the CPA2 gene cleaves the C-terminal amide or ester bond of peptides that have a free C-terminal carboxyl group (1). It prefers the C-terminal residues with aromatic side chains including Phe, Tyr, and Trp. The deduced amino acid sequence of human CPA2 consists of a signal peptide (aa 1 to 16), a pro region (aa 17 to 112), and a mature chain (aa 113 to 417). The amino acid sequence of human CPA2 is 99.5%, 90%, 87%, 86% and 70% identical to that of chimpanzee, canine, rat, mouse and chicken.

References:

1. Auld, D.S. (2004) in *Handbook of Proteolytic Enzymes* (ed. Barrett, *et al.*) p. 821, Academic Press, San Diego.