

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Carboxypeptidase A2/CPA2 in direct ELISAs and Western blots. In Western blots, recognizes the pro form but not the activated enzyme.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 384014
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Carboxypeptidase A2/CPA2 Tyr17-His417 Accession # P48052
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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
<b>Western Blot</b>	1 µg/mL	Recombinant Human Carboxypeptidase A2 (Catalog # 2896-ZN)
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Carboxypeptidase A2/CPA2 (Catalog # 2896-ZN), see our available <a href="#">Western blot detection antibodies</a>
<b>Neutralization</b>	Measured by its ability to neutralize Recombinant Human Carboxypeptidase A2/CPA2 (0.1 µg/mL, Catalog # 2896-ZN) cleavage of the fluorogenic peptide substrate N-acetyl-Phe-Thiaphe-OH (0.1 mM). The Neutralization Dose (ND <sub>50</sub> ) is typically 1.5 µg/mL.	

## PREPARATION AND STORAGE

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

## 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 (residues 1 to 16), a pro region (residues 17 to 112), and a mature chain (residues 113 to 417).

### References:

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