

## DESCRIPTION

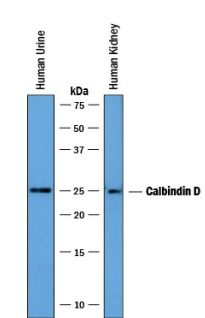
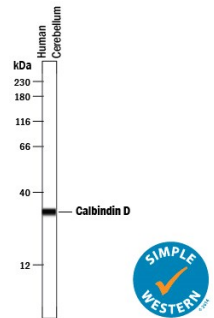
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Calbindin D in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Calbindin D Ala2-Asn261 Accession # P05937
<b>Formulation</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 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	5 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human brain (cerebellum), intestine, and rat brain (cerebellum)
<b>Simple Western</b>	10 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human Calbindin D by Western Blot.</b> Western blot shows human urine and lysates of human kidney tissue. PVDF membrane was probed with 5 µg/mL of Goat Anti-Human Calbindin D Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3320) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for Calbindin D at approximately 25 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Simple Western</b></p>  <p><b>Detection of Human Calbindin D by Simple Western™.</b> Simple Western lane view shows lysates of human brain (cerebellum) tissue, loaded at 0.2 mg/mL. A specific band was detected for Calbindin D at approximately 32 kDa (as indicated) using 10 µg/mL of Goat Anti-Human Calbindin D Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3320). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p>
--	---

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 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

Calbindin D, also known as Calbindin 1, is a Vitamin D-dependent cytoplasmic protein in the EF-hand calcium binding protein family that includes calmodulin, parvalbumin, troponin C, and S100. Calbindin D is widely expressed and regulates calcium homeostasis. Calbindin D protects neurons from excitotoxic and apoptotic cell death by buffering excess calcium. Human, mouse, and rat Calbindin D share 98% amino acid sequence identity.