

DESCRIPTION

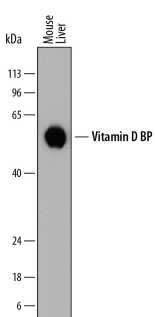
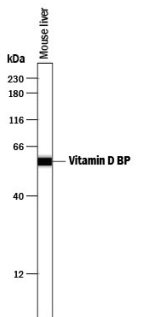
Species Reactivity	Mouse
Specificity	Detects mouse Vitamin D BP in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human Vitamin D BP is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Vitamin D BP Leu17-Ser476 Accession # P21614
Formulation	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.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Mouse Vitamin D BP by Western Blot. Western blot shows lysates of mouse liver. PVDF membrane was probed with 0.5 µg/mL of Sheep Anti-Mouse Vitamin D BP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4188) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Vitamin D BP at approximately 52-58 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Simple Western</p>  <p>Detection of Mouse Vitamin D BP by Simple Western™. Simple Western lane view shows lysates of mouse liver tissue, loaded at 0.2 mg/mL. A specific band was detected for Vitamin D BP at approximately 58 kDa (as indicated) using 5 µg/mL of Sheep Anti-Mouse Vitamin D BP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4188) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

VDBP (Vitamin D binding protein; also group-specific component and GC-globulin) is a 52-58 kDa, monomeric glycoprotein member of the ALB/AFP/VDB family of molecules. It is found in blood, urine and CSF, carries Vitamin D and its metabolites, and serves as an actin-scavenging protein. Mature mouse VDBP is 460 amino acids (aa) in length. It contains three albumin-type domains (aa 26-476) that are accompanied by 14 intrachain disulfide bonds. There are three potential alternative splice forms. One shows a deletion of aa 346-421, a second shows a 67 aa substitution for aa 345-421, and a third shows a 34 aa substitution for aa 346-423. All these variants involve the second and third albumin-like domains. Mature mouse VDBP (aa 17-476) is 77% and 90% aa identical to human and rat VDBP, respectively.