Human/Mouse/Rat Fetuin B Antibody

Antigen Affinity-purified Polyclonal Goat IgG

Catalog Number: AF1725

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Fetuin B in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant human (rh) Fetuin A, rhCystatin A, rhCystatin B, rhCystatin C, rhCystatin D, rhCystatin E/M, rhCystatin S, rhCystatin SA, and rhCystatin SN is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Fetuin B Met19-Pro382 Accession # Q9UGM5
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 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
Knockout Validated	µg/mL	Fetuin B is specifically detected in mouse serum and but is not detectable in Fetuin B knockout mouse serum (KO)
Western Blot	0.25 µg/mL	See Below
Simple Western	2.5 µg/mL	See Below

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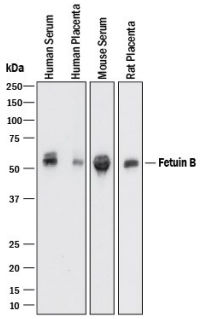
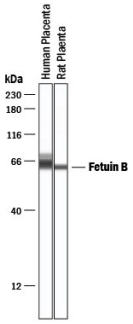
DATA

Western Blot



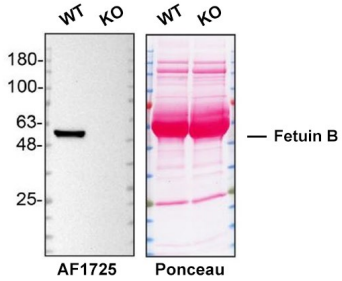
Detection of Human, Mouse, and Rat Fetuin B by Western Blot. Western blot shows human serum, human placenta tissue lysate, mouse serum, and rat placenta tissue lysate. PVDF membrane was probed with 0.25 µg/mL of Goat Anti-Human/Mouse/Rat Fetuin B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1725) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Fetuin B at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western



Detection of Human Fetuin B by Simple Western™. Simple Western lane view shows lysates of human placenta tissue and rat placenta tissue, loaded at 0.2 mg/mL. A specific band was detected for Fetuin B at approximately 64 kDa (as indicated) using 2.5 µg/mL of Goat Anti-Human/Mouse/Rat Fetuin B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1725) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

Knockout Validated



Western Blot Shows Mouse Fetuin B Specificity Using Knockout Cell Line. Western blot shows WT and Fetuin B KO serum from mouse. Nitrocellulose membrane was probed with 0.2 µg/mL of Goat Anti-Human/Mouse/Rat Fetuin B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1725) followed by HRP-conjugated donkey anti-goat IgG Secondary Antibody. A specific band was detected for Fetuin B at approximately 60 kDa (as indicated), but is not detectable in knockout sera. The Ponceau stained transfer of the blot is shown. This experiment was conducted under reducing conditions. Image, protocol, and testing courtesy of YCharOS Inc. See ycharos.com for additional details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 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.

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BACKGROUND

Fetuins are members of the cystatin superfamily of cysteine protease inhibitors (1-3). Additional members of this superfamily are kininogen and histidine-rich glycoprotein. Fetuin A and B are two known members of the fetuin family. Hepatocytes are believed to be the principal cellular source, but other cell types also express it (4, 5). Fetuin A, also known as α2-Heremans-Schmid glycoprotein, is an inhibitor of basic calcium phosphate precipitation and a negative acute-phase protein (6, 7). Normal circulating levels of Fetuin A in adults (300-600 ug/mL) fall significantly (30-50%) during injury and infection (7). Fetuin B is a newer member whose function is not fully characterized (1, 2). Fetuin A and B display similarities and differences in their characteristics. Fetuin B exhibits reduction of calcification, while both mRNA levels were down-regulated during the acute phase in inflammation-induced rats (4). However, they share only 20% amino acid sequence identity (2). The amounts of Fetuin B in human serum, unlike Fetuin A, vary with gender and are higher in females than in males (4).

References:

1. Oliver, E. *et al.* (1999) Genomics. **57**:352.
2. Oliver, E. *et al.* (2000) Biochem. J. **350**:589.
3. Kellemann, J. *et al.* 1989, J. Biol. Chem. **264**:14121.
4. Denecke, B. *et al.* (2003) Biochem. J. **376**:135.
5. Schäfer, C. *et al.* (2003) J. Clin. Invest. **112**:357.
6. Dziegielewska, K. M. *et al.* (1996) Histochem. Cell Biol. **106**:319.
7. Gangneux, C. *et al.* (2003) Nucleic Acids Res. **31**:5957.

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