

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Fetuin B in ELISAs. In sandwich immunoassays, no cross-reactivity or interference with recombinant human (rh) Fetuin A, rhCystatin A, B, C, rhMMP-2, 9, rhBMP-2, 4, 6, rhTGF-β1, or rhTGF-β2 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 212633
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Fetuin B Met19-Pro382 Accession # NP_055190
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. 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.

Human Fetuin B Sandwich Immunoassay		Reagent
<b>ELISA Capture</b>	2-8 µg/mL	Human Fetuin B Antibody (Catalog # <a href="#">MAB17251</a> )
<b>ELISA Detection</b>	0.5-2.0 µg/mL	Human Fetuin B Biotinylated Antibody (Catalog # <a href="#">BAM17251</a> )
<b>Standard</b>		Recombinant Human Fetuin B (Catalog # <a href="#">1725-PI</a> )

## 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.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

Fetuin is a member 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 α<sub>2</sub>-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 µg/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. Kelleman, 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.