

## 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 # 212607                                                                                                                                                                                                                            |
| <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<br>Met19-Pro382<br>Accession # Q9UGM5                                                                                                                                                                        |
| <b>Conjugate</b>          | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## 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>ELISA Capture (Matched Antibody Pair)</b>   | Optimal dilution of this antibody should be experimentally determined. |
| <b>ELISA Detection (Matched Antibody Pair)</b> | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>                            | Optimal dilution of this antibody should be experimentally determined. |

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## 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 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).

## PRODUCT SPECIFIC NOTICES

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