ALPHA DIAGNOSTIC INTERNATIONAL

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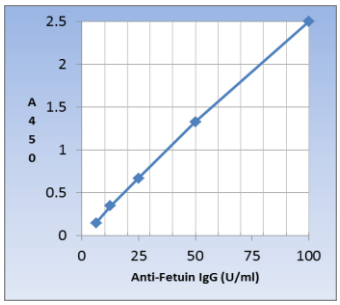
Anti- Bovine fetuin Ig's ELISA kits

This kit is intended for measuring anti-bovine fetuin IgG antibodies serum or plasma of rabbit immunized or naturally exposed to bovine fetuin or biologics that contained traces of fetuins. The kit measure only IgG-subtype with no detection of IgM or IgA anti-PRP. ELISA kits (rabbit, mouse, human etc) follow the same general design and protocol.



Anti-Bovine Fetuin IgG (a typical curve)

Rabbit Anti-Bovine Fetuin IgG ELISA Kit Features

- Purified bovine fetuin antigen pre-coated, stabilized, ready-to-use 96-well strip plate, stable for 6-12 months.
- Convenient, stable, liquid calibrators:containing anti-fetuin IgG
- 100ul samples diluted 1:100 or more;
- 105 min room temp assay, 3 incubation steps,;
- Contains all necessary reagents. Stability ~12 months

This kit is for measuring anti-bovine fetuin B IgG in rabbit serum or plasma samples. For in vitro research use only.

Assay Procedure: Allow all reagents to reach room temperature. Arrange and label required number of strips.

Step 1. Pipet **100 ul each** of pre-diluted stds, samples (diluted 1:100 or more). Mix gently and incubate at room temp for **60 min.**
Step 2. **Aspirate and wash** 3X. **Add 100 ul of antibody-HRP** Conjugate to all wells, mix gently and incubate at room temp for **30 min.**
Step 3. **Aspirate and wash** 5X. Add **100 ul of TMB** solution to all wells, mix gently, and incubate at room temp for **15 min.**
Step 4. Pipet **100 ul of stop solution** into each well and mix gently (blue color turns yellow). **Measure absorbance at 450 nm**. Determine antibody concn in each sample using the standards (results are expressed in units/ml).

Results are expressed as antibody index or Anti-Fetuin IgG levels (units/ml; arbitrary units) and read off the calibration curve.

General Information

The product of the AHSG gene is commonly referred to as fetuin in species other than the human. Fetuin was subsequently shown to be a very abundant plasma protein in fetal cattle, sheep, pig, and goat, and also to be present in humans and rodents. Fetuins are proteins, which are made in the liver and secreted into the blood. They belong to a large group of binding proteins mediating the transport and availability of a wide variety of substances (drugs, hormones, fatty acids, vitamins etc) in the blood. The best known representative of these carrier proteins is serum albumin, the most abundant protein in the blood plasma of adult animals. Fetuin is more abundant in fetal blood, hence the name fetuin (from lat. fetus). Fetal calf serum contains more fetuin than albumin, while adult serum contains more albumin than fetuin. Human fetuin is synonymous with α2-HS-Glycoprotein (genetic symbol AHSG), α2-HS, A2HS, AHS, HSGA and fetuin-A. Fetuin-A exists as a single copy gene in the human and mouse genomes. A closely related gene, fetuin-B also exists in the human, rat and mouse genomes. Like fetuin-A fetuin-B is made predominantly by the liver and to a lesser extent by a number of secretory tissues. Fetuins exist it in all vertebrate genomes including fish and reptiles.

Fetuin is a mixture of proteins containing a wider range of growth factors and attachments factors normally found in fetal calf serum. The major protein in fetuin is ~48.5 Kda (74% protein; glycosylated). The other minor components of fetuins are alpha-1 and alpha-2 globulins and variety of growth factors such as IGF-1/2 and FGFs. Fetuins, along with Transferrin, selenium and insulin, have been used in serum-free defined media formulations to increase cell attachment and growth. Fetuin is also an effective serine protease and it may improve cellular viability by inhibiting several proteases. Human fetuin is synonymous with α2-HS-Glycoprotein (genetic symbol AHSG), α2-HS, A2HS, AHS, HSGA and fetuin-A. Fetuin-A exists as a single copy gene in the human and mouse genomes. A closely related gene, fetuin-B also exists in the human, rat and mouse genomes. Like fetuin-A fetuin-B is made predominantly by the liver and to a lesser extent by a number of secretory tissues. Fetuins exist it in all vertebrate genomes including fish and reptiles. Due to the concerns of BSE, there is increasing demand of animal derived proteins from countries that are free from BSE and Scrapie. The US recognizes Australia and New Zealand as the counties free from BSE and Scrapie. Australia is also free of List A diseases as defined by the World Organization for Animal Health (OIE). Fetuin supplied by ADI is produced from selected animals in New Zealand or Australia that have passed inspection and free from diseases.

Any biological material (recombinant proteins, monoclonal antibodies or humans therapeutics) that was manufactured with raw material from bovine serum may contain fetuins as host cell contaminants. Animals or humans when given these biologics may induce antibodies to fetuins. ADI's Anti-bovine fetuin IgG ELISA kits have been designed to detect and measure antibodies to fetuins in animal/human serum or plasma.

Similar ELISA kits for detect antibodies to bovine serum albumin (BSA) or the whole adult or fetal calf serum proteins are also available.

Fetuin Related Reagents and ELISA kits

Items Description	Species	Antibody Type IgG Cat#	Antibody Type IgM Cat#
Anti-bovine fetuin IgG ELISA Kit	Rabbit	800-170-BFR	
	Mouse	800-180-BFM	

800-170-BFr-Flr rev 130807A

India Contact:
Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com