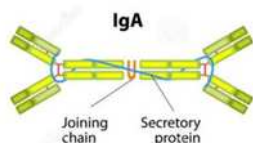


Product Data Sheet

Cat # 20001-3-1

**Bovine IgA (non-immune Serum), purified**

Size: □ 100 ug



IgA is the predominant immunoglobulin class in body secretions, such as saliva, tears, bronchial secretions, nasal mucosal secretions, prostatic fluid, vaginal secretions, and mucous secretions of the small intestines. It may serve both to defend against local infection and to prevent access of foreign antigens to the general immunologic system. It is also found in small amounts in blood. Because it is resistant to degradation by enzymes, secretory IgA can survive in harsh environments such as the digestive and respiratory tracts, to provide protection against microbes that multiply in body secretions. IgA does not activate complement, and opsonises only weakly. Its heavy chains are of the type  $\alpha$ . It exists in two forms, IgA1 (90%) and IgA2 (10%): IgA1 is found in serum and made by bone marrow B cells. In IgA2, the heavy and light chains are not linked with disulfide but with noncovalent bonds. IgA2 is made by B cells located in the mucosae and has been found to secrete into colostrum, maternal milk, tears and saliva.

IgA is found in secretion in a specific form called secretory IgA, a dimer of two IgA monomers linked by two additional chains: One of these is the J chain (from join), which is a polypeptide of molecular mass 15 kD, rich with cysteine and structurally completely different from other immunoglobulin chains. This chain is formed in the antibody-secreting cells. The dimeric form of IgA in the outer secretions also has a polypeptide of the same molecular mass (15 kD) called the secretory chain and is produced by epithelial cells. It is also possible to find trimeric and even tetrameric IgA.

A healthy non-immunized population of bovine was used to collect serum. IgA was prepared by selective salt precipitation, column chromatography (Sephadex, and DEAE-ion exchange columns), and affinity purification. The resulting preparation was judged to be >95% pure by IEP and SDS-Page. It does not react with anti-Bovine IgM or IgG or other serum proteins in double immunodiffusion.

**Form and Storage**

The normal Bovine IgA is provided as liquid (in PBS pH 7.4 + 0.05% sodium azide as preservative) or in lyophilized form. The product should be **stored at 4°C** for short term and -20oC for long term storage. It is stable for a minimum of 1 year. Do not store diluted solutions. Sodium azide, an inhibitor of peroxidase, must be avoided if used with antibody-HRP conjugates.

The **lyophilized products** should be dissolved in PBS, pH 7.4 to prepare stock solution at a desired concentration by gentle rocking or vortexing at room temperature. Centrifuge the IgG solution briefly (10,000 g, 15 min) to remove any particulate matter. It should be aliquoted and stored frozen for long term use.

**Suggested Uses**

This preparation of normal Bovine IgA is suitable for coating the ELISA plates or as a non-immune control for ELISA, dot blot, Western or IHC. Recommended testing concn. is approx. 1-10 ug/ml. It is, however, possible that this preparation may be unsuitable for some antigens or cell/tissue extracts and may give slightly higher background. Switching to another preparation from different Bovine or vendor may alleviate this problem.

*This product is for in vitro research use only.*

**Related Items**

Catalog#	Prod Description
20001-1	Bovine Serum Control IgG (non-immune) purified
20001-1-B	Bovine IgG-Biotin conjugate (non-immune, isotype control) purified
20001-1-F	Bovine IgG-FITC conjugate (non-immune, isotype control) purified
20001-1-HP	Bovine IgG-HRP conjugate (non-immune, isotype control) purified
20001-2-1	Bovine (non-immune) Serum IgM, purified
20001-2-1-B	Bovine IgM-Biotin Conjugate (control, non-immune), purified
20001-2-B	Bovine IgG Fc-Biotin conjugate (non-immune, isotype control) purified
20001-2-F	Bovine IgG Fc-FITC conjugate (non-immune, isotype control) purified
20001-2-HP	Bovine IgG Fc-HRP conjugate (non-immune, isotype control) purified
20001-2-UL	Bovine IgG Fc, unlabeled (non-immune, isotype control) purified
20001-3-1	Bovine IgA (non-immune serum), purified
20001-3-B	Bovine IgG Fab-Biotin conjugate (non-immune, isotype control) purified
20001-3-F	Bovine IgG Fab-FITC conjugate (non-immune, isotype control) purified
20001-3-HP	Bovine IgG Fab-HRP conjugate (non-immune, isotype control) purified
20001-3-UL	Bovine IgG Fab, unlabeled (non-immune, isotype control) purified
20001-4-B	Bovine IgG Fab2-Biotin conjugate (non-immune, isotype control) purified
20001-4-F	Bovine IgG Fab2-FITC conjugate (non-immune, isotype control) purified
20001-4-HP	Bovine IgG Fab2-HRP conjugate (non-immune, isotype control) purified
20001-4-UL	Bovine IgG Fab2, unlabeled (non-immune, isotype control) purified
20001-3-1	160329SV

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