



## Product Data Sheet

**Cat # 20017-4-1**  
**Cat # 20017-4-100**

**Pig/Swine IgA, purified**  
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**Size: 25 ug**  
**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 1,5 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 (1,5 kD) called the secretory chain and is produced by epithelial cells. It is also possible to find trimeric and even tetrameric IgA.

### Source of antigen

A healthy non-immunized population of pigs was used to collect serum. IgA was prepared by a combination of purification procedures: delipidation, selective precipitation, gel filtration, etc. The resulting preparation was judged to be >95% pure by SDS-PAGE. Purified pig IgA yielded, single arc with anti-pig IgA and anti-pig serum. No reactivity with anti-Pig IgG, anti-Pig IgM, and anti-pig albumin. Mol wt by gel filtration ~700-200 Kda.

### Form and Storage

IgA is supplied in PBS, pH 7.4 (see lot sp concn on the vial) and 0.05% azide in liquid or in lyophilized form. The product should be **stored at 4°C** for short term and -20°C for long term storage. It is stable for a minimum of 1 year. Do not store diluted solutions. The **lyophilized products** should be dissolved in PBS, pH 7.4 to prepare desired concentration by gentle rocking or vortexing at room temperature. It should be aliquoted and stored frozen at -20°C for long term use.

### Suggested Uses

This preparation of normal Pig IgA is suitable for coating the ELISA plates or as a non-immune control for ELISA, dot blot, Western or IHC.

### Related items

20017-1	Pig IgG (swine non-immune, isotype control), purified
20017-1-B	Pig IgG-Biotin conjugate (swine non-immune, isotype control), purified
20017-1-F	Pig IgG-FITC conjugate (swine non-immune, isotype control), purified
20017-1-HP	Pig IgG-HRP conjugate (swine non-immune, isotype control), purified
20017-2-1	Pig IgM (swine non-immune, isotype control), purified
20017-2-1-B	Pig IgM (swine non-immune, isotype control), purified
20017-3-B	Pig IgG Fc-Biotin conjugate (swine non-immune, isotype control), purified
20017-3-F	Pig IgG Fc-FITC conjugate (swine non-immune, isotype control), purified
20017-3-HP	Pig IgG Fc-HRP conjugate (swine non-immune, isotype control), purified
20017-3-UL	Pig IgG Fc (swine non-immune, isotype control), purified
20017-4-100	Pig IgA (swine non-immune, isotype control), purified
9010	Pig IgA ELISA Kit, 96 tests, Quantitative (swine/porcine)
9020	Pig IgG ELISA Kit, 96 tests, Quantitative (swine/porcine)
90320	Anti-Pig IgG (H+L)-HRP conjugate (swine/porcine)
90325	Anti-Pig IgG (H+L), aff pure, unconjugated (Swine-Porcine)
90330	Anti-Pig IgG (H+L)-FITC conjugate (Swine-Porcine)
90340	Anti-Pig IgG (H+L)-Biotin conjugate (Swine-Porcine)
90419	Anti-Pig IgG (Fc), aff pure, unconjugated (Swine-Porcine)
90420	Anti-Pig IgG (Fc)-HRP Conjugate (Swine-Porcine)
90430	Anti-Pig IgG (Fc)-FITC Conjugate (Swine-Porcine)
90440	Anti-Pig IgG (Fc)-Biotin Conjugate (Swine-Porcine)
90445	Anti-Pig IgA aff pure, unlabeled (Swine-Porcine)
90446	Anti-Pig IgA-HRP Conjugate (Swine-Porcine)
90447	Anti-Pig IgA-Biotin Conjugate (Swine-Porcine)
90455	Anti-Pig IgM aff pure, unlabeled (Swine-Porcine)
90456	Anti-Pig IgM-HRP Conjugate (Swine-Porcine)
90457	Anti-Pig IgM-Biotin Conjugate (Swine-Porcine)

20017-4-1-Pig-IgA

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

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