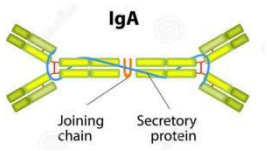
Product Data Sheet

Anti-Mouse IgA (Alpha-chain specific)-Antibodies and conjugates

Cat# 40019	Goat Anti-Mouse IgA (Alpha sp), unlabeled	**Size**: 0.5 mg
Cat# 40020	Goat Anti-Mouse IgA (Alpha)-HRP conjugate	**Size**: 1 ml
Cat# 40021	Goat Anti-Mouse IgA (Alpha)-FITC labeled	**Size**: 0.5 ml
Cat# 40050	Goat Anti-Mouse IgA (Alpha)-AP labeled	**Size**: 0.5 ml



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 α. 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.

Goats were immunized with antigen grade mouse IgA. Antibodies have been isolated using ammonium sulfate, ion-exchange, and affinity chromatography. Antibodies were made specific for alpha-chain by removing any antibodies crossreactive with other Ig's. Specificity has been tested using IEP, immunodiffusion, and ELISA. Purified antibodies react with mouse IgA with minimal reactivity with mouse IgG and IgM. The antibody may recognize other species IgA's that have common Alpha chains. However, no antibody is detected to other serum proteins. Purified antibodies are supplied as unlabeled, HRP-, Biotin, FITC, and AP conjugates.

Form and Storage

Cat# 40019, unlabeled

The antibody is supplied in PBS, pH 7.4, and 0.05% azide in either **lyophilized** (0.5 mg) or **liquid** form (0.5 mg/0.5 mll). Reconstitute powder in PBS in 0.5 ml to prepare 1 mg/ml solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Cat# 40020, HRP-conjugate

Purified antibody was coupled to HRP (RZ>3.0) using periodate method. The molar enzyme to protein (E/P) ratio = 4.0. The antibody is supplied in stabilizing buffer, 0.1% prolcin-300 as preservative in either **lyophilized** (1 ml) or **liquid** form (1 ml). Reconstitute powder in PBS in 1 ml. Store at 4oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:1,000-1:10,000 ELISA, 1:1K-1:5K for western, and 1:200-1:1000 (IHC).

Cat# 40021, FITC-conjugate

Purified anti-Mouse IgA (Alpha-chain sp) antibody was coupled to FITC at F/P ratio ~4-5:1. The antibody is supplied in PBS, pH 7.4, 0.2% BSA and 0.05% azide in either **lyophilized** (0.5 ml) or **liquid** form (0.5 mg/0.5 ml). Reconstitute powder in PBS in 0.5 ml to prepare 1 mg/ml solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.
Suggested conjugate dilutions are 1:200-1:2000 for immunofluorescence.

Absorption Wavelength: 495 nm
Emission Wavelength: 528 nm

Cat# 40050, AP-conjugate

The conjugate is provided at ~0.5-1 mg/ml as liquid in a stabilizing buffer (50 mM HEPES pH 7.1, 0.1 M NaCl, 1 mM MgCl2, 0.1 mM ZnCl2, pH 7.5, containing 0.2% bovine serum albumin, 0.05% sodium azide). The product should be **stored at 4ºC** and is stable for a minimum of 1 year. Do not store diluted solutions.

Suggested conjugate dilutions are 1:1,000-1:10,000 ELISA, 1:1K-1:5K for western, and 1:200-1:1000 (IHC).

Recommended Working Dilution for ELISA

Working dilution for the specific application should be determined by the investigator to obtain the best conditions. Working solution should be prepared immediately before use and diluted solution should be discarded.

All products are for In vitro research use only.

Related Material available for ADI

Catalog#	Prod Description
20102-100	Mouse IgA isotype control, purified
20102-100-B	Mouse IgA-Biotin Conjugate (isotype control), purified
20102-100-F	Mouse IgA-FITC Conjugate (isotype control), purified
20102-100-HP	Mouse IgA-HRP Conjugate (isotype control), purified
20102-100-PC5	Mouse IgA-R-PE-Cy5 Conjugate (isotype control), purified
20102-SET	Mouse IgA, IgGs (1, 2a, 2b, 3), IgM, and IgE isotype controls (set of 7 IgGs)
40019	Anti-Mouse IgA, aff pure
40020	Anti-Mouse IgA (alpha-chain sp.)-HRP conjugate
40021	Anti-Mouse IgA (alpha-chain sp.)-FITC conjugate
40050	Anti-Mouse IgA (alpha-chain sp.)-Alk. Phosphatase conjugate
40419	Anti-Mouse IgA, aff pure
40440	Anti-Mouse IgA-Biotin conjugate
6310	Mouse IgA ELISA Kit, 96 tests, Quantitative

40019-Mouse-IgA-Conjugates 160208SV

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