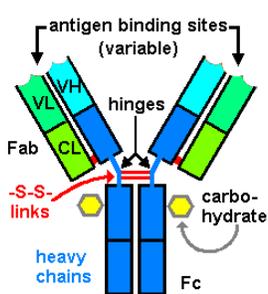


Product Data Sheet

<input type="checkbox"/> Cat# 20001-4-UL	Bovine IgG Fab2, unlabeled (non-immune, isotype control) purified	<input type="checkbox"/> Size: 0.1 mg
<input type="checkbox"/> Cat# 20001-4-B	Bovine IgG Fab2-Biotin conjugate (non-immune, isotype control) purified	<input type="checkbox"/> Size: 0.1 mg
<input type="checkbox"/> Cat# 20001-4-F	Bovine IgG Fab2-FITC conjugate (non-immune, isotype control) purified	<input type="checkbox"/> Size: 0.1 mg
<input type="checkbox"/> Cat# 20001-4-HP	Bovine IgG Fab2-HRP conjugate (non-immune, isotype control) purified	<input type="checkbox"/> Size: 0.1 mg



Immunoglobulin G (IgG)

Immunoglobulin G (IgG) is a type of antibody. It is a protein complex composed of four peptide chains—two identical heavy chains and two identical light chains arranged in a Y-shape typical of antibody monomers. IgG has molecular weight of approximately 150 kDa, heavy or H chain approximately 50 kDa and light or L chain 25 kDa. Each IgG has two antigen binding sites. Representing approximately 75% of serum antibodies in humans, IgG is the most common type of antibody found in the circulation. The antigen-

binding (Fab) fragment is a region on an antibody that binds to antigens. It is composed of one constant and one variable domain of each of the heavy and the light chain. The variable domain contains the paratope (the antigen-binding site), comprising a set of complementarity determining regions, at the amino terminal end of the monomer. Each arm of the Y thus binds an epitope on the antigen. The F(ab)₂ fragment is a protein composed of two Fab fragments. The two Fab fragments are held together by disulfide bridges or alternatively by adhesive domains

Form and Storage

The normal Bovine IgG Fab2 is provided as liquid (1 mg/ml in 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% sodium azide as preservative) 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. Sodium azide, an inhibitor of peroxidase, must be avoided if used with antibody-HRP conjugates.

Cat# 20001-4-UL, unlabeled IgG

Bovine IgG Fab2 is supplied in 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 and 0.01% azide in either **lyophilized** (100 ug) or **liquid** form (1 mg/ml or see lot sp. concn on the vial). Reconstitute powder in deionized water at 100 ug/ml or as desired. Store at -20°C in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw. Controls are typically tested at 0.1-1 ug/ml depending upon the application.

Cat# 20001-4-B, Biotin-conjugate

Purified Bovine IgG Fab2 was coupled to Biotin using ADI Biotinylation kit # 80300 at F/P ratio ~10-20:1. The antibody is supplied in 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% (w/v) Sodium Azide in either **lyophilized** (50 tests per vial) or **liquid** form (50 tests/100 ul or see lot sp. concn on the vial). Reconstitute powder in deionized water in 100 ul or more. Store at -20°C in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw. No preservatives have been added. Sodium azide (0.1%) or merthiolate (0.05%) can be added if necessary to prevent bacterial growth.

Suggested conjugate dilutions are 1:5,000-1:30,000 ELISA. For other applications use as needed.

Cat# 20001-4-F, FITC-conjugate

Purified Bovine IgG Fab2 was coupled to FITC at F/P ratio ~4-5:1. The antibody is supplied in 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 + 0.01% (w/v) Thimerosal in either **lyophilized** (50 tests per vial) or **liquid** form (50 tests/500 ul or ~50 ug/vial). Reconstitute powder in deionized water in 0.1 ml or as desired. Store at 4°C in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:50-1:500 for immunofluorescence or as optimized for a given tests.

Color: Green

Absorption: 495 nm

Emission: 528 nm

Cat# 20001-4-HP, HRP-conjugate

Purified Bovine IgG Fab2 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 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2, in either **lyophilized** (50 tests per vial) or **liquid** form (50 tests/100 ul or approx. 50 ug/100ul). Reconstitute powder in deionized water in 0.1 ml. Store at 4°C 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).

Suggested Uses

This preparation of normal (control) IgG is suitable for coating the ELISA plates or as a non-immune control for ELISA, dot blot, Western or IHC. It can also be used to prepare immunoadorbent affinity column to remove certain antibodies or to purify antibodies to it. 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.

Anti-rabbit IgG, Chicken, Bovine, Human IgG-HRP/AP Conjugates are also available.

20001-4-Bovine-IgG-Fab2

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