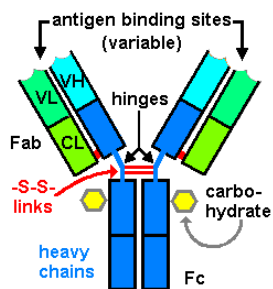


Product Data Sheet

Human IgG (Fc) fragment and conjugates

□ Cat # 20007-1-Fc	Human IgG (Fc) fragment, purified	Size: □ 0.5 mg
□ Cat # 20007-1-Fc-B	Human IgG Fc-Biotin conjugate (isotype control, non-immune), purified	Size: □ 0.1 mg
□ Cat # 20007-1-Fc-F	Human IgG Fc-FITC conjugate (isotype control, non-immune), purified	Size: □ 0.1 mg
□ Cat # 20007-1-Fc-HP	Human IgG Fc-HRP conjugate (isotype control, non-immune), purified	Size: □ 0.1 mg



Immunoglobulin G (IgG)

An Fc receptor is a protein found on the surface of certain cells – including, among others, B lymphocytes, follicular dendritic cells, natural killer cells, macrophages, neutrophils, eosinophils, basophils and mast cells – that contribute to the protective functions of the immune system. Its name is derived from its binding specificity for a part of an antibody known as the Fc (Fragment, crystallizable) region. Fc receptors bind to antibodies that are attached to infected cells or invading pathogens. Their activity stimulates phagocytic or cytotoxic cells to

destroy microbes, or infected cells by antibody-mediated phagocytosis or antibody-dependent cell-mediated cytotoxicity

This product was prepared from normal serum by a multi-step process which includes delipidation, salt fractionation, ion exchange chromatography and papain digestion followed by chromatographic separation and extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Human Serum, anti-Human IgG and anti-Human IgG F(c). No reaction was observed against anti-Human IgG F(ab)₂ or anti-Papain.

Form and Storage

Cat# 20007-1-FC, unlabeled

Human IgG (Fc) fragment is provided as liquid (1 mg/ml in PBS pH 7.4 + 0.05% sodium azide as preservative) or in lyophilized form (amount of protein stated on the vial). The product should be stored at 4°C for short term and -20°C for long term storage. Alternatively, for extended storage mix liquid with an equal volume of glycerol, aliquot contents and freeze at -20° C or below. It is stable for a minimum of 1 year. Do not store diluted solutions. Sodium azide, an inhibitor of peroxidase, must be removed if used with antibody-HRP conjugates.

The **lyophilized products** should be dissolved in PBS, pH 7.4 to prepare 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 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 Human or vendor may alleviate this problem.

Cat# 20007-1-Fc-F, FITC-conjugate

Purified Human IgG Fc was coupled to FITC at F/P 1% BSA and 0.05% azide at 100 ug/100 ul. Store at -20°C in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw. Suggested conjugate dilutions are 1:20-1:500 for immunofluorescence.

Absorption Wavelength: 495 nm

Emission Wavelength: 528 nm

Cat# 20007-1-Fc-B, Biotin-conjugate

Purified Human IgG Fc was coupled to Biotin using Biotinamidocaproate N-Hydroxysuccinimide Ester (BAC) at F/P ratio ~10-20:1. The antibody is

supplied in PBS, pH 7.4, 1% BSA and 0.05% azide in either **lyophilized** or **liquid** form (see lot sp. concn on the vial). Reconstitute powder in PBS in 100 ul to prepare 1 mg/ml solution. Store at -20°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.

Cat# 20007-1-Fc-HP; HRP-conjugate

Purified Human IgG Fc 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 (PBS, pH 7.4, 1% BSA), 0.1% proclin-300 as preservative in either **lyophilized** or **liquid** form (see lot sp concn on the vial). Reconstitute powder in PBS in 100 ul. 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).

The purified antibody was coupled to R-Phycoerythrin (R-PE) (Molecular Weight 240,000 daltons) from seaweed using proprietary methods (A565nm/A280nm ~3-4).

Absorption @490 nm, 545 nm and 565 nm
Emission Wavelength: 580 nm

The conjugate is provided in PBS, pH 7.5, containing 0.1% bovine serum albumin, (BSA) 0.05% sodium azide and stabilizing agent). **DO NOT FREEZE**. The product should be stored at 4°C and is stable for a minimum of 1 year. Do not store diluted solutions.

Recommended usage 1 test equivalent of antibody per million cells for Flow cytometry or FACS. Due to many experimental variations, optimum concn must be determined for a given applications

Recommended Working Dilution for ELISA

Working dilution for the specific application should be determined by the investigator to obtain the best conditions and prepared immediately before use. Diluted solution should be discarded. This product can be used in immunodiffusion, ELISA, flow cytometry, immunofluorescence, or immunolocalization.

This product is for in vitro research use only.

Related Items available from ADI

Catalog#	Prod Description
20007-1-1	Human IgG, purified (serum, non-immune, isotype control)
20007-1-100	Human IgG, purified (serum, non-immune, isotype control)
20007-1-25	Human IgG, purified (serum, non-immune, isotype control)
20007-1-5	Human IgG, purified (serum, non-immune, isotype control)
20007-1-B	Human IgG-Biotin conjugate (isotype control, non-immune), purified
20007-1-HP	Human IgG-HRP Conjugate (isotype control)
20007-2	Human IgM, purified (isotype control)
20007-2-10	Human IgM purified (isotype control)
20007-2-5	Human IgM purified (isotype control)
20007-2-FC5M	Human IgM Fc5u fragment, purified (isotype control)
20007-2-M	Human IgM, Myeloma Plasma (isotype control)
20007-1-FAB2	Human IgG F(ab) ₂ fragment, purified
20007-1-FAB2-B	Human IgG Fab2 fragment-Biotin Conjugate

2007-1-FC-Conjugates 151203SV

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