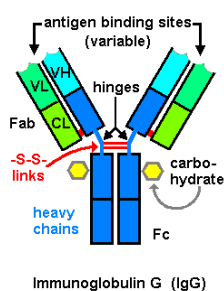


Product Data Sheet

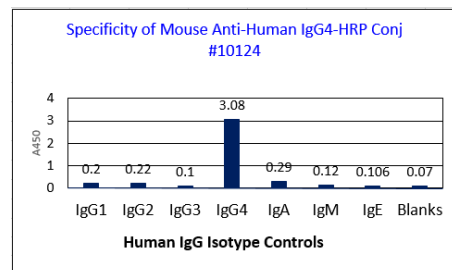
**Mouse Anti-Human IgG4 (Fc region) Antibodies and Conjugates**

□ <b>Cat#</b> 10124-UL	Mouse Anti-Human IgG4, unlabeled	<b>Size:</b> 100 ug
□ <b>Cat#</b> 10124-BT	Mouse Anti-Human IgG4-Biotin conjugate	<b>Size:</b> 0.5 ml
□ <b>Cat#</b> 10124-FITC	Mouse Anti-Human IgG4-FITC conjugate	<b>Size:</b> 0.5 ml
□ <b>Cat#</b> 10124-AP	Mouse Anti-Human IgG4-Alk. Phos. Conjugate	<b>Size:</b> 0.5 ml
□ <b>Cat#</b> 10124-PE	Mouse Anti-Human IgG4-PE (phycoerythrin) conjugate	<b>Size:</b> 0.5 ml
□ <b>Cat#</b> 10124	Mouse Anti-Human IgG4-HRP conjugate	<b>Size:</b> 0.5 ml



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. IgG4 constitutes only 4% of total serum conc.

Highly purified human serum IgG4 was used as source of antigen to produce monoclonal antibodies. A designated clone (WHO/IUIS Study # HP6025) has been selected for the study of human IgG4. Anti-human IgG4 monoclonal antibody has been extensively purified to remove other contaminating antibodies. This monoclonal antibody (isotype IgG4) is specific for human IgG4 (Fc region). Antibodies have been isolated using ammonium sulfate, ion-exchange, and affinity chromatography. Purified anti-human IgG4 was labeled with highly purified preparation of calf intestinal alkaline phosphatase, HRP, Biotin or FITC. The product reacts with human IgG4 and no antibody is detected to other serum proteins.



Specificity of the anti-human IgG4 was tested using HRP conjugate form on various IgG isotype coated wells. The antibody is specific for human IgG4.

1-shil10124-anti-human-IgG4-HRP-conj

**Form and Storage**

**Cat# 10124-UL, unlabeled**

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

**Cat# 10124-FITC, FITC-conjugate**

Purified antibody was coupled to FITC at F/P ratio ~5. The antibody is supplied in PBS, pH 7.4, 1% BSA, 40% glycerol and 0.05% azide. Store at -20oC 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# 10124-BT, Biotin-conjugate**

Purified antibody 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. Reconstitute powder in water to make stock solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:5,00-1:5,000 ELISA.

**Cat# 10124, 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% proclin-300 as preservative in, either **lyophilized**. Reconstitute powder in 0.5 ml water to make stock solution. Store at 4oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:5,00-1:5,000 ELISA.

**Cat# 10124-AP, AP-conjugate**

The conjugate is provided as liquid in a stabilizing buffer (50 mM Tris-150 mM NaCl-1 mM MgCl<sub>2</sub>, pH 7.5, containing 1% bovine serum albumin, 0.05% sodium azide and 50% glycerol). The product should be **stored at 4°C** and is stable for a minimum of 1 year. Do not store diluted solutions.

Suggested conjugate dilutions are 1:5,00-1:5,000 ELISA.

**Cat# 10124-PE, PE-conjugate**

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 4oC and is stable for a minimum of 1 year. Do not store diluted solutions.

Recommended usage is ~10 ul/10<sup>6</sup> cells for Flow cytometry or FACS. Due to many experimental variations, optimum concn must be determined for a given application.

**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

**References:** 1. Jefferis, R (1985) Immunol. Lett. 10, 223-252; Goldbalt, D et al. (1993) J Immunol. Methods. 166, 281-285; Hamilton, R (1993) J Immunol. Methods. 158, 107-122

This product is for in vitro research use only.

**Related Material available for ADI**

Catalog#	Prod Description
10120	Anti-Human IgG (gamma-chain sp.)-HRP conjugate
10121	Anti-Human IgG1 (Fc-region)-HRP conjugate
10122	Anti-Human IgG2 (Fc-region)-HRP conjugate
10123	Anti-Human IgG3 (hinge-region)-HRP conjugate
10124	Anti-Human IgG4 (Fc-region)-HRP conjugate
10150	Anti-Human IgG (gamma-chain)-Alk. Phosphatase conjugate
10320	Anti-Human IgG (H+L)-HRP conjugate
10330	Anti-Human IgG (H+L)-FITC conjugate
10350	Anti-Human IgG (H+L)-Alk. Phosphatase conjugate

10124-Anti-Human-IgG4-Conjugate

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**India Contact:**

**Life Technologies (India) Pvt. Ltd.**

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444  
Email: [customerservice@lifetechindia.com](mailto:customerservice@lifetechindia.com) Website: [www.lifetechindia.com](http://www.lifetechindia.com)