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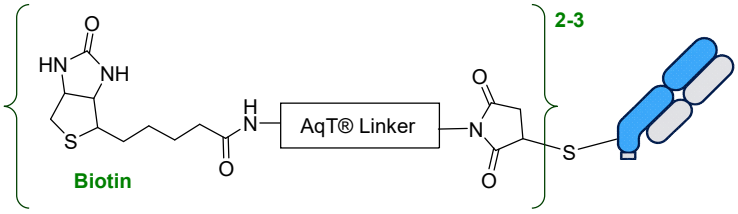
# AqT® Biotin Fab' Fragment Goat Anti-Human IgG, Fcγ Fragment Specific, Cross-Adsorbed

100 µg of conjugate per tube

Product Number: **CM86174**




## Product Description

AqT® Biotin F(ab')$_2$ Fragment Goat Anti-Human IgG is a monovalent, biotinylated secondary-antibody fragment specific for the Fcγ region of human IgG. The Fab' fragment is prepared from a polyclonal goat secondary antibody. The antibody is cross-adsorbed to minimize cross-reactivity with bovine, mouse, and rabbit serum proteins.

The product is site-specifically biotinylated through hinge-region thiols using CellMosaic's proprietary super-hydrophilic AqT® linker. Positioning biotin away from the antigen-binding region helps preserve antibody-binding activity while providing consistent and accessible biotin placement. Because the Fab' fragment lacks the goat Fc region, it can reduce Fc-receptor-mediated background. Its smaller size, compared with intact IgG or F(ab')$_2$, may also reduce steric hindrance and improve access to crowded binding sites.

Each Fab' fragment contains an average of 2–3 biotin molecules, supporting strong streptavidin-mediated signal amplification and sensitive, reproducible detection across a variety of immunoassay applications.

For more information about AqT® Biotinylated Secondary Antibodies, visit:
https://cellmosaic.com/biotinylated-secondary-antibodies/

The product is sold as 1 tube of 100 µg of conjugate. For bulk quantities and custom packaging requirements, please contact us for pricing and availability.

## Product Information

- **Chemical Name**: AqT® Biotin Fab' Fragment Goat Anti-Human IgG, Fcγ Fragment Specific
- **Molecular Weight:** Approximately 56 kDa
- **Physical Appearance:** Clear solution in 1xPBS buffer with stabilizers
- **Storage Temperature:** -20 °C or below
- **Purity:** ≥90% Fab' conjugates by SEC-HPLC (refer COA of each lot for actual value)
- **Average Biotin Loading:** 2–3 biotin molecules per antibody (refer COA of each lot for actual value)

## Antibody Information

- **Target:** Human IgG
- **Immunogen:** Human IgG Fcγ Fragment
- **Specificity:** Human IgG Fcγ
- **Species Reactivity:** Human
- **Cross-Adsorption**: Bovine, mouse, and rabbit serum proteins
- **Host Species:** Goat
- **Fragment type:** Fab' Fragment of Goat IgG, prepared by pepsin digestion followed by reduction of F(ab')$_2$
- **Antibody Type:** Polyclonal

- **Country of Manufacture:** USA

**Key Features**

- Monovalent binding to reduce secondary-antibody-mediated crosslinking
- Site-specific biotinylation through hinge-region thiols
- Average of 2–3 biotin molecules per Fab' fragment
- No goat Fc region, helping reduce Fc-receptor-mediated background
- Smaller than intact IgG or $F(ab')_2$, potentially reducing steric hindrance
- Protein content determined by UV/HPLC analysis
- Biotin incorporation measured using a biotin assay
- Cross-adsorbed to minimize cross-reactivity with bovine, mouse, and rabbit serum proteins
- **Advanced AqT® linker technology**: CellMosaic's proprietary, super-hydrophilic, water-soluble, and charge-neutral AqT® linker is designed to support aqueous solubility and minimize aggregation

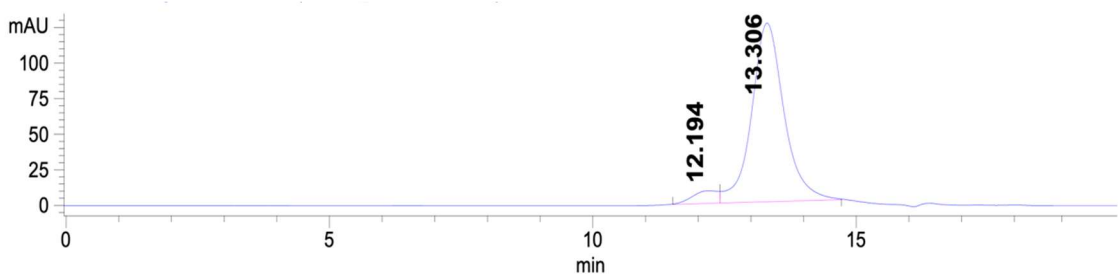
**Applications**

- Enzyme-linked immunosorbent assays (ELISA)
- Flow Cytometry, Immunohistochemistry (IHC)
- Immunocytochemistry (ICC)
- Western Blotting
- Immunoprecipitation (IP) and Pull-Down Assays
- Biosensor and Surface Immobilization, including SPR and BLI
- Cell Isolation and Magnetic Separation

**Storage/Stability**

Store the conjugate solution at −20 °C or below. Avoid repeated freeze–thaw cycles.

**Figure 1**. Representative size-exclusion HPLC profiles of AqT® Biotin Fab' Fragment Goat Anti-Human IgG, Fcγ fragment specific, Cross-Adsorbed (Lot No. S718.S9.0821F; DOL: 2.4).




## Important Notes

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