

## Anti-Complement C3b-iC3b [5G9] Standard Size Ab01609-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2a format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG1, Fc Silent™, Kappa

**Clone Number:** 5G9

**Alternative Name(s) of Target:** Complement C3; C3; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 1; Complement C3 beta chain; C3-beta-c; C3bc; Complement C3 alpha chain; C3a anaphylatoxin; Acylation stimulating protein; ASP; C3adesArg; Complement C3b alpha' chain; Complement C3c alpha' chain fragment 1; Complement C3dg fragment; Complement C3g fragment; Complement C3d fragment; Complement C3f fragment; Complement C3c alpha' chain fragment 2

**UniProt Accession Number of Target Protein:** P01024

**Published Application(s):** Blocking, functional assays, neutralizing, FC

**Published Species Reactivity:** Primates, Human

**Immunogen:** The original version of this antibody was created by immunizing a mouse with complement C3b-iC3b.

**Specificity:** This antibody is specific for complement C3b-iC3b. C3 plays a central role in the activation of the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates.

**Application Notes:** This antibody has been shown to inhibit the CPC-mediated lysis of PNH erythrocytes in humans (Lindorfer et al, 2016; pmid:20068220). A CDC assay was preformed using this antibody on human Burkitt's lymphoma cell lines, Daudi, Raji, Z138 mantle cell lymphoma cell lines and diffuse large B cell lymphoma cell line SU-DHL-4 (Beurskens et al, 2012; pmid:22368276). This antibody can also be used for flow cytometry and neutralizing applications.

**Antibody First Published in:** Beurskens et al. Exhaustion of cytotoxic effector systems may limit monoclonal antibody-based immunotherapy in cancer patients J Immunol. 2012 Apr 1;188(7):3532-41.

[PMID:22368276](#)

**Note on publication:** It describes the use of this antibody together with the RTX antibody to test whether it could increase the effectiveness in cancer treatment.

## Product Form

**Size:** 200 µg Purified antibody.

**Purification:** Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.