Goat anti-Human IgM Secondary Antibody, HRP

Product Details	
Size	2 mL
Species Reactivity	Human
Host/Isotype	Goat / IgG
Class	Polyclonal
Type	Secondary Antibody
Conjugate	HRP
Form	Lyophilized
Concentration	0.8 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.6, with 15mg/mL BSA
Contains	no preservative
Storage conditions	4° C
RRID	AB_228282

Applications	Tested Dilution	Publications
Western Blot (WB)	1:10,000-1:200,000	-
Immunohistochemistry (IHC)	1:500-1:5,000	-
Immunocytochemistry (ICC/IF)	1:500-1:5,000	-

Product Specific Information

Concentration may vary slightly from lot-to-lot, see lot-specific datasheet for exact concentration.

This antibody has been successfully used in Western blot, and ICC applications.

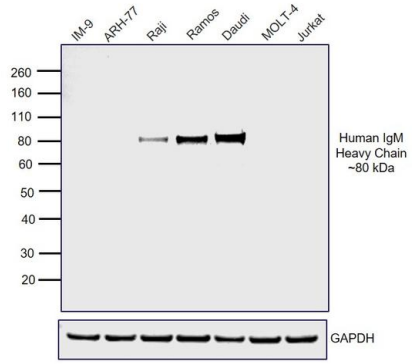
Antibody Specificity: This antibody reacts with the Fc5µ portion of the human IgM heavy chain, based on electrophoresis. No antibody was detected against normal human IgG or IgA, or against non-immunoglobulin serum proteins. However, this antibody may cross-react with IgM from other species.

Restoration and Storage: Store product at 4°C until opened. Restore with 2.0 mL distilled water (0.8 mg/mL after restoration). Centrifuge product if it is not completely clear after standing for 1-2 hours at room temperature. To judge clarity, draw product into a pasteur pipette. Product may be stored for several weeks at 4°C as an undiluted liquid. After dilution, do not use for more than one day.

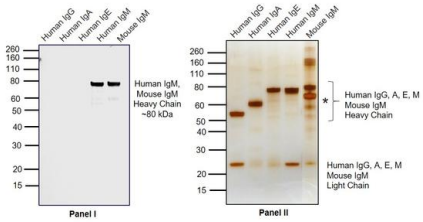
To extend the shelf-life of this product, add an equal volume of glycerol to make a final concentration of approximately 50% glycerol and store at -20°C.

Country of Origin: USA

Product Images For Goat anti-Human IgM Secondary Antibody, HRP



Human IgM Secondary Antibody (31415) in WB
Western blot was performed using Goat anti-Human IgM Secondary Antibody, HRP (Product # 31415) and an ~80 kDa band corresponding to Human IgM Heavy Chain was observed in Raji, Ramos and Daudi but not in IM-9, ARH-77, MOLT-4 and Jurkat. Whole cell extracts (30 µg) of IM-9 (Lane 1), ARH-77 (Lane 2), Raji (Lane 3), Ramos (Lane 4), Daudi (Lane 5), MOLT-4 (Lane 6) and Jurkat (Lane 7) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with Goat anti-Human IgM Secondary Antibody, HRP (Product # 31415) (1:5000 dilution) and detected using the iBright FL1500 (Product # A44115). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005). Raji, Ramos and Daudi are known to express IgM whereas IM-9 and ARH-77 express IgG and are negative for IgM. MOLT-4 and Jurkat, being T-cell lines, do not express immunoglobulins. (DOI:10.1002/eji.1830100305; 10.3791/3573; 10.1016/0022-1759(94)00286-6; PMID: 566614).



Human IgM Secondary Antibody (31415) in WB
Western blot was performed using Goat anti-Human IgM Secondary Antibody, HRP (Product # 31415) and a ~80 kDa band corresponding to Heavy Chain were observed in Human IgM and Mouse IgM but not in Human IgG, IgA and IgE (Panel I). Purified protein (100 ng) of Human IgG (Lane 1), IgA (Lane 2), IgE (Lane 3), IgM (Lane 4) and Mouse IgM (Lane 5) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with Product # 31415 (1:5000 dilution) and detected by chemiluminescence using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005) using the iBright FL1500 (Product # A44115). Silver staining was performed to establish equivalent loading of purified proteins using the Pierce™ Silver Stain Kit (Product # 24612) (Panel II). A band corresponding to BSA (*) which is part of the Mouse IgM formulation can be seen at ~60 kDa.

21 References

Prior flavivirus immunity skews the yellow fever vaccine response to cross-reactive antibodies with potential to enhance dengue virus infection. Nat Commun (2024)

SARS-CoV-2 RNAemia and Disease Severity in COVID-19 Patients. Viruses (2023)

Prior flavivirus immunity skews the yellow fever vaccine response to expand cross-reactive antibodies with increased risk of antibody dependent enhancement of Zika and dengue virus infection bioRxiv (2023)

Selective suppression of de novo SARS-CoV-2 vaccine antibody responses in patients with cancer on B cell-targeted therapy. JCI Insight (2023)

Partial RAG deficiency in humans induces dysregulated peripheral lymphocyte development and humoral tolerance defect with accumulation of T-bet+ B cells. Nat Immunol (2022)