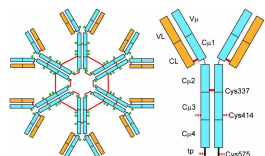


Product Data Sheet

**Anti-Mouse IgM antibodies and conjugates**

<input type="checkbox"/> <b>Cat# 40221</b>	Goat Anti-Mouse IgM, unlabeled	<b>Size:</b> 0.5 mg
<input type="checkbox"/> <b>Cat# 40220</b>	Goat Anti-Mouse IgM-HRP conjugate	<b>Size:</b> 1 ml
<input type="checkbox"/> <b>Cat# 40230</b>	Goat Anti-Mouse IgM-FITC conjugate	<b>Size:</b> 0.5 ml
<input type="checkbox"/> <b>Cat# 40240</b>	Goat Anti-Mouse IgM-Biotin conjugate	<b>Size:</b> 0.5 mg
<input type="checkbox"/> <b>Cat# 40250</b>	Goat Anti-Mouse IgM-AP conjugate	<b>Size:</b> 0.5 ml



Immunoglobulin M (IgM) is a basic antibody that is produced by B cells. IgM is by far the physically largest antibody in the human circulatory system. It is the first antibody to appear in response to initial exposure to an antigen. IgM is produced and secreted from spleen, a major site for B cell activity. IgM forms polymers where multiple immunoglobulins are covalently linked together with disulfide bonds, mostly as a pentamer (970 kda) but also as a hexamer. Because each monomer has two antigen binding sites, a pentameric IgM has 10 binding sites. The J chain is found in pentameric IgM but not in the hexameric form. Due to its polymeric nature, IgM possesses high avidity, and is particularly effective at complement activation. It contributes greatly to opsonization by activating complement and causing C3b to bind to the antigen. IgM normal plasma concentration ~1.-4 mg/ml. Low levels of IgM are associated with Wiskott-Aldrich syndrome.

Goats were immunized with antigen grade Mouse IgM. Antibodies have been isolated using ammonium sulfate, ion-exchange, and affinity chromatography and solid phase adsorbed to remove reactivity with IgA, IgG and other serum proteins. Purified anti-Mouse IgM is supplied as unlabeled, -HRP, -AP, FITC and biotin conjugate.

**Purity/Specificity**

Specificity of antibodies has been tested using IEP, immunodiffusion, and ELISA. The antibodies yielded a single precipitin arc against anti-Mouse serum and Mouse IgM. No antibody reactivity is detected to other Mouse serum proteins, IgA and IgG. Anti-Mouse IgM may crossreact with IgM from other species.

**Form and Storage**

**Cat# 40221, Anti-Mouse IgM, unlabeled**

The antibody is supplied in PBS, pH 7.4, and 0.05% azide in either **lyophilized** (0.5 mg) or **liquid** form (0.5 mg/0.5 ml). Reconstitute powder in PBS in 0.5 ml to prepare 0.5 mg/0.5 ml solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

**Cat# 40220, Anti-Mouse IgM-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% prolcin-300 as preservative in either **lyophilized** (1 ml) or **liquid** form (0.5-1 mg/ml). Reconstitute powder in PBS in 1 ml. Store at 4oC 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).

**Cat# 40230, Anti-Mouse IgM-FITC-conjugate**

Purified anti-Mouse IgM antibody was coupled to FITC at F/P ratio ~3:7. The antibody is supplied in PBS, pH 7.4, 0.2% BSA and 0.05% azide in either **lyophilized** (0.5 ml) or **liquid** form (0.5 mg/0.5 ml). Reconstitute powder in PBS in 0.5 ml to prepare 1 mg/ml solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw. Suggested conjugate dilutions are 1:200-1:2000 for immunofluorescence.

**Absorption Wavelength:** 495 nm

**Emission Wavelength:** 528 nm

**Cat# 40240, Anti-Mouse IgM-Biotin-conjugate**

Purified anti-Mouse IgM 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, 0.2% BSA and 0.05% azide in either **lyophilized** (0.5 mg) or **liquid** form (0.5 mg/0.5 ml). Reconstitute powder in PBS in 0.5 ml to prepare 1 mg/ml solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Suggested conjugate dilutions are 1:5,000-1:30,000 ELISA, 1:2K-1:10K for western.

**Cat# 40250, AP-conjugate**

The conjugate is provided at ~0.5 mg/ml as liquid in a stabilizing buffer (50 mM HEPES pH 7.1, 0.1 M NaCl, 1 mM MgCl<sub>2</sub>, 0.1 mM ZnCl<sub>2</sub>, pH 7.5, containing 0.2% bovine serum albumin, 0.05% sodium azide). 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 1:1,000-1:10,000 ELISA, 1:1K-1:5K for western, and 1:200-1:1000 (IHC).

**Recommended Working Dilution for ELISA**

Working dilution for the specific application should be determined by the investigator to obtain the best conditions. Working solution should be prepared immediately before use and diluted solution should be discarded.

**Related Material available for ADI**

<b>Catalog#</b>	<b>Prod Description</b>
MM-D1-100	Mouse IgM FITC/IgG1 PE (isotype control)
MM-D1-25	Mouse IgM FITC/IgG1 PE (isotype control)
MM-D2-100	Mouse IgM FITC/IgM PE (isotype control)
MM-D2-25	Mouse IgM FITC/IgM PE (isotype control)
20102-105	Mouse IgM isotype control, purified
20102-105-B	Mouse IgM-Biotin conjugate (isotype control)
20102-105-F	Mouse IgM-FITC conjugate (isotype control)
20102-105-HP	Mouse IgM-HRP conjugate (isotype control)
20102-105-PE	Mouse IgM-PE conjugate (isotype control)

40220-Gt-Anti-Ms-IgM

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