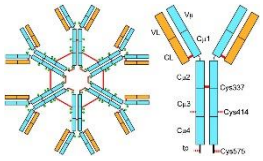
ALPHA DIAGNOSTIC INTERNATIONAL

Product Data Sheet

Anti-Monkey IgM (μ-Chain specific) antibodies and conjugates

Cat #. 70033	Goat Anti-Monkey IgM (gamma) IgG, unlabeled	Size: 0.5mg
Cat #. 70031	Goat Anti-Monkey IgM (gamma)-HRP conjugate	Size: 0.5 ml
Cat #. 70032	Goat Anti-Monkey IgM (gamma)-Alk Phos conjugate	Size: 0.5 ml
Cat #. 70035	Goat Anti-Monkey IgM (gamma)-FITC conjugate	Size: 0.5 ml
Cat #. 70039	Goat Anti-Monkey IgM (gamma)-biotin conjugate	Size: 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 monkey (old world) IgM. Antibodies have been isolated using ammonium sulfate, ion-exchange, and affinity chromatography. Antibodies were made specific for mu-chain by removing any antibodies crossreactive with light chains. Purified anti-monkey IgM (μ- chain specific) were labeled with highly purified preparation of horse radish peroxidase by periodate method (1)

Purity/Specificity
The conjugate contains affinity pure antibody at approximately 0.5 mg/ml. The molar enzyme to protein (E/P) ratio = 2:1.

Specificity has been tested using IEP, immunodiffusion, and ELISA. The product reacts with monkey IgM only. The antibody may recognize other species IgM's that have common heavy chains, particularly IgM's from other related monkeys. However, no antibody is detected to other serum proteins or IgG or IgA.

Form and Storage

Cat# 70033, unlabeled
The antibody is supplied in PBS, pH 7.4, and 0.05% azide in either **lyophilized** (0.5 mg) or **liquid** form (1 mg/ml). Reconstitute powder in PBS in 0.5 ml to prepare 1mg/ml solution. Store at -20oC in suitable aliquots. Stability is ~6-12 months. Do not freeze and thaw.

Cat# 70031, 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** (0.5 ml) or **liquid** form (1 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# 70032, AP-conjugate
The conjugate is provided at ~0.5-1 mg/ml as liquid in a stabilizing buffer (50 mM HEPES pH 7.1, 0.1 M NaCl, 1 mM MgCl2, 0.1 mM ZnCl2, 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).

Cat# 70035, FITC-conjugate
Purified 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# 70039, Biotin-conjugate
Purified antibody was coupled to Biotin using ADI Biotinylation kit # 80300 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 (1 mg/ 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.

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.

All products are for In vitro research use only.

Related Material available for ADI

Monkey IgG, IgA, IgM, and IgE ELISA kits

ELISA kits for the detection of mouse Antibodies

70031-Gt-anti-Monkey-IgM-Conj 160210SV

Alpha Diagnostic Intl Inc., 6203 Woodlake Center Dr, San Antonio, TX 78244, USA; Email: service@4adi.com
 (800) 786-5777; (210) 561-9515; Fax: (210) 561-9544; Web Site: www.4adi.com