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Datasheet for 609-1107

Human IgM mu Antibody

Overview

Description:	Goat Anti-Human IgM (mu chain) Antibody - 609-1107
Item No.:	609-1107
Size:	1 mg
Applications:	ELISA, Purification
Reactivity:	Human
Host Species:	Goat

Product Details

Background:	Anti-Human IgM (mu heavy chain) generated in goat detects specifically Human IgM mu heavy chain. Immunoglobulin M is the largest antibody isotype and the first to be secreted against an initial exposure to antigen. IgM is predominantly produced in the spleen. Formed from covalently linking 5 immunoglobulins together. Anti-Human IgM mu chain antibody is ideal for investigators in Immunology, Microbiology, and Cell Biology.
Synonyms:	goat anti-Human IgM mu chain Antibody, Gt-a-Human IgM, Human IgM Antibody in Goat, Human Secondary Antibody
Host Species:	Goat
Specificity:	IgM µ chain
Clonality:	Polyclonal
Format:	IgG

Target Details

Reactivity:	Human
Immunogen Type:	Native Protein
Immunogen:	Human IgM whole molecule

Purity/Specificity:	Anti-Human IgM mu heavy chain was prepared from monospecific antiserum by immunoaffinity chromatography using Human IgM coupled to agarose beads followed by solid phase adsorption (s) to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Goat Serum, Human IgM and Human Serum. No reaction was observed against other human heavy or light chain proteins.

Application Details

Tested Applications:	ELISA
Suggested Applications:	Purification (Based on references)
Application Note:	Anti-Human IgM mu heavy chain has been tested by ELISA and is suitable for use in immunoelectrophoresis, western-blot, competitive western-blot, ELISA and competitive ELISA assays. Specific conditions for reactivity and signal detection should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
IHC:	1:1,000 - 1:5,000
WB:	1:1,000 - 1:5,000

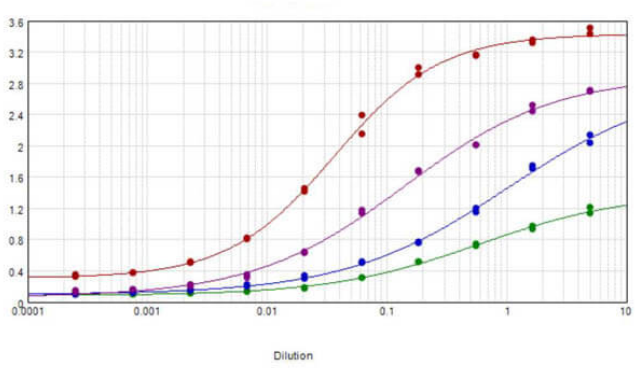
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.1 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



ELISA
ELISA results of purified Goat anti-Human IgM antibody tested against purified human IgM [RED line], human IgG F (ab')2 {PURPLE line], human IgG Fab [BLUE line], human IgG F(c) [GREEN line]. Each well was coated in duplicate with 1.0 µg of IgM [p/n 009-0107], IgG F(ab')2 [009-0104], IgG Fab [p/n 009-0105], IgG F(c) [009-0103]. The starting dilution of antibody was 5µg/ml and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using Blocking buffer MB-060-1000, Donkey-anti-Goat IgG HRP conjugate (p/n 616-1302) 1:12, 000, and TMB-1000 substrate.

References

- Serrano-Coll, H et al. Social and environmental conditions related to Mycobacterium leprae infection in children and adolescents from three leprosy endemic regions of Colombia. *Bmc Infectious Diseases* (2019)
- Yang Q et al. Analysis of pre-existing IgG and IgM antibodies against polyethylene glycol (PEG) in the general population. *Anal Chem.* (2016)
- Campbell CT, Llewellyn SR, Demberg T, Morgan IL, Robert-Guroff M, Gildersleeve JC. High-throughput profiling of anti-glycan humoral responses to SIV vaccination and challenge. *PLoS One.* (2013)

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