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Datasheet for 004-0107

Dog IgM

Overview

Description:	Dog IgM Whole Molecule - 004-0107
Item No.:	004-0107
Size:	1 mg
Applications:	SDS-PAGE, ELISA
Origin:	Dog

Product Details

Background:	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, the approximate molecular weight of IgM is 900kDa and possesses 10 binding sites (though due to the size of most antigens, not all sites are capable of binding at once). Due to this large size, IgM is typically isolated to the serum.
Synonyms:	Dog Immunoglobulin M
Species of Origin:	Dog
Format:	IgM
Type:	Native Protein

Target Details

Purity/Specificity:	Dog IgM whole molecule was prepared from normal serum by a multi-step process which includes delipidation, selective precipitation and tandem molecular sieve chromatography followed by extensive dialysis against the buffer stated above. Dog IgM whole molecule was assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Dog Serum and anti-Dog IgM (μ chain specific). No reaction was observed against anti-Dog IgG F(c). Some light chain cross reactivity will occur with anti-Dog IgG.

Application Details

Tested Applications:	SDS-PAGE

Suggested Applications:	ELISA (Based on references)
Application Note:	Dog IgM whole molecule has been tested in SDS-Page and can be utilized as a control or standard reagent in Western Blotting and ELISA experiments.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
IHC:	User Optimized
WB:	User Optimized

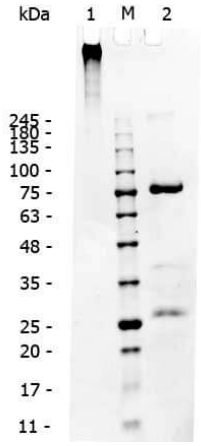
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.99 mg/mL by UV absorbance at 280 nm
Buffer:	0.1 M Tris Chloride, 0.5 M Sodium Chloride, pH 8.0
Preservative:	0.1% (w/v) Sodium Azide

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vial at 4° C prior to opening. Dog IgM whole molecule is stable 4° C as an undiluted liquid. Dilute only prior to immediate use. For extended storage mix with an equal volume of glycerol, 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



SDS-PAGE
SDS-PAGE of Dog IgM. Lane 1: Non-Reduced Human IgG. Lane 2: 5µL OPAL Pre-stained Marker MB-210-0500. Lane 3: Reduced Dog IgM. Load: 1µg per lane. Predicted/Observed size: Non-reduced 900 kDa, Reduced at 75, 25 kDa.

References

- Lynch TJ et al. Ferret Lung Transplantation Models Differential Lymphoid Aggregate Morphology Between Restrictive and Obstructive Forms of Chronic Lung Allograft Dysfunction. *Transplantation.* (2022)

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