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Datasheet for 025-0143

Llama IgG3 isotype control

Overview

Description:	Llama IgG3 Isotype Control - 025-0143
Item No.:	025-0143
Size:	0.5 mg
Applications:	SDS-PAGE
Origin:	Llama

Product Details

Background:	Comparative studies of old world camelids (Camelus bactrianus and Camelus dromedarius) and new world camelids (Lama pacos, Lama glama and Lama vicugna) have shown that heavy-chain-only immunoglobulins represent between 35% - 70% of total IgG in the sera of all species. Such antibodies are homodimers of heavy chains that lack the CH1 domain of conventional antibodies and therefore do not interact with light chains, exhibiting a lower molecular weight ~100 kDa. In llama and other species of camelids, these heavy-chain-only immunoglobulins belong to the IgG2 and IgG3 subclasses of gamma chain antibodies.
Synonyms:	Llama IgG3 isotype, Llama IgG3 subclass isotype
Species of Origin:	Llama
Format:	IgG3
Type:	Native Protein

Target Details

Purity/Specificity:	Llama IgG3 isotype control has been prepared from llama serum by multiple chromatography steps using a combination of protein A and protein G chromatography. Coomassie stained SDS-PAGE of non-reduced llama IgG3 shows a band of ~100 kDa whereas the reduced form exhibits ~43 kDa. No bands corresponding to llama IgG1 or IgG2 are observed.

Application Details

Tested Applications:	SDS-PAGE
Application Note:	Llama IgG3 isotype control has been tested by SDS-Page and can be utilized as a control or standard reagent in Flow Cytometry, Western Blotting, and ELISA experiments where determination of sample isotype is important.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
FC:	User Optimized
WB:	User Optimized
Other:	Tested by SDS page reduced and non-reduced 1x dilution.

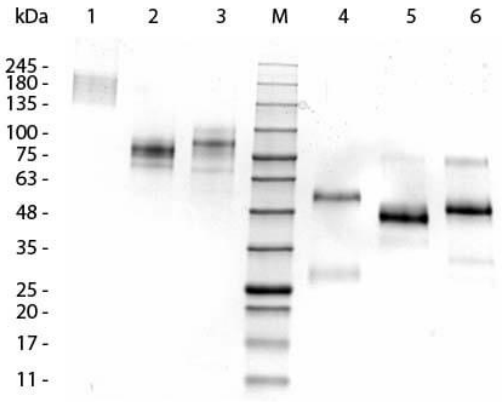
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.20 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:	25% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



SDS-PAGE

SDS-PAGE of Llama IgG3 Isotype Control. Lane 1: Llama IgG1 (p/n 025-0140), Non-reduced. Lane 2: Llama IgG2 (p/n 025-0143), Non-reduced. Lane 3: Llama IgG3 (p/n 025-0144), Non-reduced. M: 3µL Opal Pre-stained Ladder (MB-210-0500). Lane 4: Llama IgG1, Reduced. Lane 5: Llama IgG2, Reduced. Lane 6: Llama IgG3, Reduced. Load: 1.0 µg per lane. Predicted/Observed size: Llama IgG3 90 kDa Non-reduced; 48 kDa Reduced.

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