

## Datasheet for 025-0640

## Llama IgG1 isotype control Biotin

### Overview

<b>Description:</b>	Llama IgG1 Isotype Control Biotin Conjugated - 025-0640
<b>Item No.:</b>	025-0640
<b>Size:</b>	100 µg
<b>Origin:</b>	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.

All gamma chain camelid antibodies exhibiting the more conventional assembly of two light and two heavy chains with molecular weight ~150 kDa, belong to the IgG1 subclass.

<b>Synonyms:</b>	Llama IgG1 isotype, Llama IgG1 subclass isotype, Llama IgG1 Biotin Conjugated, Llama IgG1 BAC, Llama isotype control
<b>Species of Origin:</b>	Llama
<b>Conjugate:</b>	Biotin
<b>Format:</b>	IgG1
<b>Type:</b>	Native Protein

### Target Details

**Purity/Specificity:** Llama IgG1 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 unconjugated llama IgG1 shows a band of ~150 kDa whereas the reduced form exhibits ~55 kDa (heavy chain) and ~25 kDa (light chain). No bands corresponding to unconjugated llama IgG2 or IgG3 are observed. Biotin Conjugated Llama IgG1 was proven by Dot Blot.

## Application Details

<b>Application Note:</b>	Llama IgG1 Biotin Conjugated isotype control can be utilized as a control or standard reagent in Flow Cytometry, ELISA, and western blotting experiments where determination of sample isotype is important.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	User Optimized
<b>FC:</b>	User Optimized
<b>WB:</b>	User Optimized

## Formulation

<b>Physical State:</b>	Lyophilized
<b>Concentration:</b>	1.0 mg/mL by UV absorbance at 280 nm
<b>Buffer:</b>	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
<b>Reconstitution Volume:</b>	100 $\mu$ L
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

## Shipping & Handling

<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. 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.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Disclaimer

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