

## Datasheet for 025-0602

# Llama IgG Biotin

### Overview

<b>Description:</b>	Llama IgG Whole Molecule Biotin Conjugated - 025-0602
<b>Item No.:</b>	025-0602
<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 all other species of camelids, these heavy-chain-only immunoglobulins belong to the IgG2 and IgG3 subclasses of gamma chain antibodies. 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>	Immunoglobulin G from Llama, IgG from Llama, Llama IgG biotin conjugated, Llama IgG Whole Molecule
<b>Species of Origin:</b>	Llama
<b>Conjugate:</b>	Biotin
<b>Format:</b>	IgG
<b>Type:</b>	Native Protein

### Target Details

**Purity/Specificity:** Llama IgG 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); non-reduced unconjugated llama IgG2 shows a band of ~100 kDa whereas the reduced form exhibits ~46 kDa; non-reduced unconjugated llama IgG3 shows a band of ~100 kDa whereas the reduced form exhibits ~43 kDa. Biotin Conjugated

Llama IgG Whole Molecule was proven by Dot Blot.

## Application Details

<b>Application Note:</b>	Llama IgG Biotin can be utilized as a control or standard reagent in SDS, Western Blotting, flow cytometry, and ELISA experiments. Specific conditions for reactivity should be optimized by the end user.
<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

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.