

## Datasheet for 634-401-044

## Llama IgG2 Antibody

### Overview

<b>Description:</b>	Anti-LLAMA IgG2 (RABBIT) Antibody - 634-401-044
<b>Item No.:</b>	634-401-044
<b>Size:</b>	0.5 mg
<b>Applications:</b>	Dot Blot, ELISA, WB
<b>Reactivity:</b>	Llama
<b>Host Species:</b>	Rabbit

### Product Details

**Background:** Camelids produce functional IgG isotypes that do not incorporate light chains. 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. At present, three subclasses of camelid IgG have been identified (IgG1, IgG2, IgG3), of which IgG2 and IgG3 lack the light chains. IgG2 consists of dimers of short heavy chains, which are characterized by a normal Fc region without a CH1 domain. IgG2 shows a molecular weight of approximately 90 kDa and this smaller size improves its bio-distribution and allows a better tissue penetration. Of special importance is the long complementary determining region (CDR) loop which inserts deep into the active site of an enzyme enabling a complete neutralization of an enzyme. Anti-Llama IgG2 generated in rabbit detects specifically Llama IgG2 isotype. This anti-Llama secondary Antibody is suitable for western blot, ELISA, ChIP and immunohistochemistry as well as other more general immunoassays.

<b>Synonyms:</b>	IgG2 antibody, Llama IgG2, anti-subclass secondary antibody
<b>Host Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>Format:</b>	IgG

### Target Details

<b>Reactivity:</b>	Llama
<b>Immunogen Type:</b>	Native Protein

<b>Immunogen:</b>	Llama IgG2
<b>Purity/Specificity:</b>	Anti-Llama IgG2 antibody is directed against Llama IgG2 with minimal cross-reactivity to Llama IgG3 and Llama IgG1. Anti-Llama IgG2 antibody was prepared from monospecific antiserum by immunoaffinity chromatography. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, Llama IgG2 and Llama Serum. Specificity was confirmed by ELISA. For IgG1 and IgG3 reactivity was less than 5% against target (IgG2). This antibody does not recognize recombinant VHH with IgG3 background.

## Application Details

<b>Tested Applications:</b>	Dot Blot, ELISA, WB
<b>Application Note:</b>	Antibody Anti-Llama IgG2 has been tested by ELISA, dot blot, and western blot and is suitable for immunoblotting (western or dot blot), ELISA, and immunohistochemistry assays requiring lot-to-lot consistency.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ELISA:</b>	1:60,000
<b>IHC:</b>	User Optimized
<b>WB:</b>	1:20,000-1:40,000

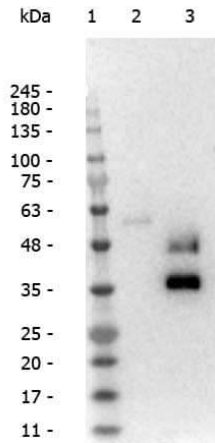
## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	1.07 mg/ml by UV absorbance at 280 nm
<b>Buffer:</b>	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.01% (w/v) Sodium Azide
<b>Stabilizer:</b>	None

## Shipping & Handling

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

## Images



### Western Blot

Western Blot of Rabbit Anti-Llama IgG2 antibody. Lane 1: Opal Pre-stained Ladder (MB-210-0500). Lane 2: Llama IgG1 (p/n 025-0142). Lane 3: Llama IgG2 (p/n 025-0143). Load: 50 ng per lane. Product: Rabbit Anti-Llama IgG2 at 1:40,000. Secondary antibody: Gt-a-Rb HRP (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: (p/n MB-070) overnight at 4°C. Predicted/Observed size: 48 kDa for Llama IgG2. Other band(s): ~38 kda non-specific. Non-specific background against IgG1 (HC) can be reduced by further diluting the antibody. User optimization recommended.

## 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.