

Datasheet for 634-401-040**Llama IgG1 Antibody****Overview**

Description:	Anti-LLAMA IgG1 (RABBIT) Antibody - 634-401-040
Item No.:	634-401-040
Size:	0.5 mg
Applications:	Dot Blot, ELISA, WB
Reactivity:	Llama
Host Species:	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. IgG1 binds strongly to protein A and G, is composed of conventional antibodies, and totals 25 % of serum IgG. Llama IgG1 antibodies migrate as a 150-kDa protein in SDS-polyacrylamide gel under non-reducing conditions. Under reducing conditions, IgG1 antibodies split into four proteins (two of each H- and L-chains), which gives protein bands of about 52-55 kDa (H-chain) and about 27 kDa (L-chain). Anti-Llama IgG1 generated in rabbit detects specifically the Llama IgG1 isotype. This anti-Llama secondary Antibody is suitable for western blot, ELISA, ChIP and immunohistochemistry as well as other more general immunoassays.

Synonyms:	IgG1 antibody, Llama IgG1, anti-subclass secondary antibody
Host Species:	Rabbit
Specificity:	IgG1
Clonality:	Polyclonal
Format:	IgG1

Target Details

Reactivity:	Llama
--------------------	-------

Immunogen Type:	Native Protein
Immunogen:	Llama IgG1
Purity/Specificity:	Anti-Llama IgG1 antibody is directed against Llama IgG1 isotype with minimal cross-reactivity to Llama IgG2 and Llama IgG3. Anti-Llama IgG1 antibody was prepared from monospecific antiserum by immunoaffinity chromatography. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-rabbit serum, Llama IgG1 and Llama Serum. No reaction was observed against Llama IgG2 and Llama IgG3. Specificity was confirmed by ELISA. For IgG2 and IgG3 reactivity was less than 5% against target (IgG3). This antibody does not recognize recombinant VHH with IgG3 background.
Relevant Links:	• 634-401-040 SDS

Application Details

Tested Applications:	Dot Blot, ELISA, WB
Application Note:	Antibody Anti-Llama IgG1 has been tested by ELISA, dot blot, and western blot and is suitable for IEP, immunoblotting (western or dot blot), ELISA, and immunohistochemistry assays requiring lot-to-lot consistency.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1 ug/ml
IP:	User Optimized
WB:	1:20,000 or 1:40,000

Formulation

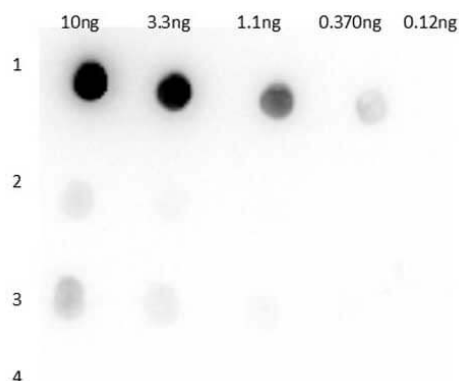
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Dry Ice
----------------------------	---------

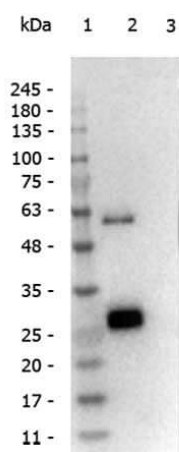
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year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

Images



Dot Blot

Dot Blot of Rabbit anti-Llama IgG1 antibody. Antigen: 1) Llama IgG1 (p/n 025-0140), 2) Llama IgG2 (p/n 025-0143), 3) Llama IgG3 (p/n 025-0144), 4) VHH protein (p/n 000-001-GM6). Load: 10ng, 3.3ng, 1.1ng, and 0.12ng as indicated. Primary antibody: Llama IgG1 antibody at 1ug/mL for one hour at RT. Secondary antibody: Gt-a-Rb HRP (p/n 611-103-122) secondary antibody at 1:40,000 for 30 min at RT. Block: (p/n MB-070) overnight at 4°C.



Western Blot

Western Blot of Rabbit Anti-Llama IgG1 antibody. Lane 1: Opal Pre-stained Ladder (p/n 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 IgG1 at 1:20,000. 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: 50 kDa, 30 kDa for Llama IgG1. Other band(s): none.

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.