

Datasheet for 013-0102**Sheep IgG****Overview**

Description:	Sheep IgG Whole Molecule (BULK ORDER) - 013-0102
Item No.:	013-0102
Size:	25 mg
Applications:	SDS-PAGE, ELISA
Origin:	Sheep

Product Details

Background:	Secreted as part of the adaptive immune response by plasma B cells, Sheep immunoglobulin G constitutes 75% of serum immunoglobulins. Immunoglobulin G binds to viruses, bacteria, as well as fungi and facilitates their destruction or neutralization via agglutination (and thereby immobilizing them), activation of the complement cascade, and opsonization for phagocytosis. The whole IgG molecule possesses both the F(c) region, recognized by high-affinity Fc receptor proteins, as well as the F(ab) region possessing the epitope-recognition site. Both heavy and light chains of the antibody molecule are present.
Synonyms:	Sheep Immunoglobulin Gamma, Immunoglobulin G
Species of Origin:	Sheep
Format:	IgG
Type:	Native Protein

Target Details

Purity/Specificity:	Sheep IgG whole molecule was prepared from normal serum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. Sheep IgG whole molecule was assayed by immunoelectrophoresis resulted in a single precipitin arc against anti-Sheep IgG and anti-Sheep Serum.
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Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	ELISA (Based on references)
Application Note:	Sheep IgG whole molecule has been tested in SDS-Page and can be utilized as a control or standard reagent in Western Blotting and ELISA experiments.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	User Optimized
IHC:	User Optimized
WB:	User Optimized

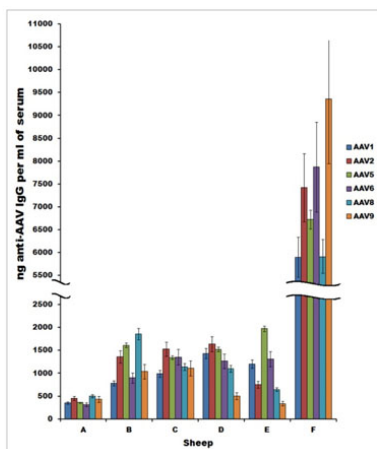
Formulation

Physical State:	Lyophilized
Concentration:	10.0 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
Reconstitution Volume:	2.5 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

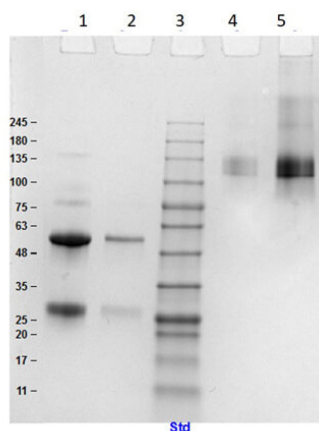
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. Sheep IgG whole molecule is 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



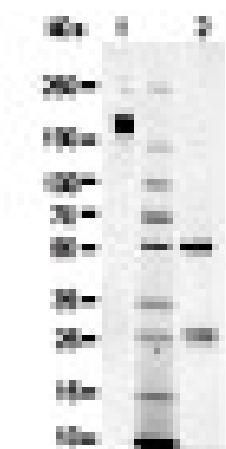
ELISA

Presence in sheep of antibodies that recognize common AAV serotypes. ELISAs were performed on sera from a panel of 6 healthy sheep using AAV1, AAV2, AAV5, AAV6, AAV8, or AAV9 particles as the antigen. Results are presented as concentration of IgG against each AAV serotype in each individual animal's serum. All samples were run in triplicate, and the depicted values represent the mean of 3 separate experiments. Sheep IgG (p/n 013-0102) was used to prepare a standard curve. Fig 1. PMID: 24086458.



SDS-PAGE

SDS PAGE Results of Sheep IgG Whole Molecule. Lane 1: Sheep IgG Reduced [5µg]. Lane 2: Sheep IgG Reduced [1µg]. Lane 3: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 4: Sheep IgG Non-Reduced [1µg]. Lane 5: Sheep IgG Non-Reduced [5µg]. 4-20% Gel, Coomassie stained.



SDS-PAGE

SDS-Page of Sheep IgG Lane 1: Sheep IgG Non-Reduced Lane 2: Sheep IgG Reduced Load: 1.0 ug per lane Non-Reduced Predicted/Obsevered Size: 160 kDa/160 kDa Reduced Predicted/Obsevered Size: 28 and 55 kDa/28 and 55 kDa

References

- Teller J et al. Characterization of naturally-occurring humoral immunity to AAV in sheep. *PLoS One*. (2013)

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.