

Datasheet for 200-401-B55S**IL13 Antibody****Overview**

Description:	Anti-Swine IL-13 (RABBIT) Antibody - 200-401-B55S
Item No.:	200-401-B55S
Size:	25 µL
Applications:	ELISA, WB
Reactivity:	Bovine, Pig, Sheep
Host Species:	Rabbit

Product Details

Background:	Interleukin 13 (IL-13), of the IL-4 superfamily, is a cytokine secreted by many cell types, but especially T helper type 2 (Th2) cells, that is an important mediator of allergic inflammation and disease. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4R α) and at least one IL-13-specific binding chain. Most of the biological effects of IL-13, like those of IL-4, are linked to a single transcription factor, STAT6. In humans, IL-13 can induce immunoglobulin E (IgE) secretion from activated B cells. In mice, deletion of IL-13 does not markedly affect either Th2 cell development or antigen-specific IgE responses induced by potent allergens. Deletion of IL-4 abrogates these responses. IL-13 acts as a molecular bridge linking allergic inflammatory cells to the non-immune cells in contact with them, thus altering physiological function. Although IL-13 is associated primarily with the induction of airway disease, including airway hyperresponsiveness, goblet cell metaplasia and mucus hypersecretion, it also induces airway matrix metalloproteinases as part of a mechanism that protects against excessive allergic inflammation that predisposes to asphyxiation.
Synonyms:	rabbit anti-Interleukin-13 antibody, rabbit anti-IL-13 antibody, IL13, Interleukin13, IL 13, Interleukin 13
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	IL13
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Reactivity:	Bovine, Pig, Sheep
Immunogen Type:	Recombinant Protein
Immunogen:	This protein-A purified antibody was prepared from whole rabbit serum produced by repeated immunizations with full length recombinant protein raised in yeast, corresponding to mature swine IL-13 protein.
Purity/Specificity:	This product was Protein-A purified from monospecific antiserum by chromatography. This antibody is specific for swine IL-13 protein. A BLAST analysis was used to suggest reactivity with IL-13 from swine sources based on 100% homology with the immunizing sequence. The following homologies may indicate chances of cross-reactivity when amino acid similarity and not just exact sequence is accounted: 89-90% homology to IL-13 from sheep, dolphin, beluga, and cattle, 83-88% to human and certain monkey IL-13, 80-82% to dusky titi, macaque, baboon, mangabey, dog, llama, camel, and galago, 75-78% to horse, and 67-72% to rat, mouse, and gerbil. Cross-reactivity with IL-13 from other sources has not been determined.
Relevant Links:	• NCBI - 189176151 • UniProtKB - B3GDZ5 • GeneID - 396721

Application Details

Tested Applications:	ELISA, WB
Application Note:	This protein-A purified antibody has been tested for use in ELISA and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 13.2 kDa in size corresponding to swine IL-13 protein by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
WB:	2 µg/mL

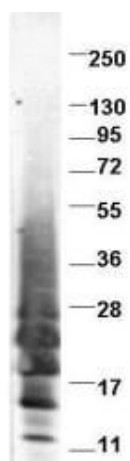
Formulation

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 or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Expiration:	Expiration date is three (3) months from date of receipt.

Images



Western Blot

Western blot using Rockland's protein-A purified anti-swine IL-13 antibody shows detection of recombinant swine IL-13 at 13.2kDa raised in yeast. Multiple bands are expected of the glycosylated protein. Protein was purified and resolved by SDS-PAGE, then transferred to PVDF membrane. Membrane was blocked with 3% BSA (BSA-30, diluted 1:10), and probed with Rockland's, Inc. Anti-swine IL-13. After washing, membrane was probed with Dylight™ 649 Conjugated Anti-Rabbit IgG (H&L) (Donkey) Antibody (611-743-127).

References

- Dawson HD et al. Porcine cytokines, chemokines and growth factors: 2019 update *Res Vet Sci.* (2019)

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.