

Datasheet for 210-401-310**IL-6 Antibody****Overview**

Description:	Anti-Mouse IL-6 (RABBIT) Antibody - 210-401-310
Item No.:	210-401-310
Size:	100 µg
Applications:	FC, IHC, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	Interleukin (IL)-6, also known as BCDG, BCGF and BSF-2, is an important proinflammatory and immunoregulatory cytokine expressed by various cells. Interleukin-6 has been shown to inhibit the growth of early stage and to promote the proliferation of advanced stage melanoma cells in vitro. Anti-IL-6 antibody is ideal for investigators involved in Cancer, Neuroscience and Immunology research.
Synonyms:	rabbit anti-IL-6 antibody, rabbit anti-Interleukin-6 antibody, Interleukin6 cytokine, IL6, B-cell stimulatory factor 2, BSF-2, Interferon beta-2, IFN-beta-2, Hybridoma growth factor, CTL differentiation factor, CDF, Interleukin HP-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Il6
Reactivity:	Mouse
Immunogen Type:	Recombinant Protein
Immunogen:	Anti-IL-6 is an IgG fraction antibody prepared from rabbit antiserum after repeated immunizations with recombinant mouse IL-6 protein produced in E.coli.

Purity/Specificity: This product is an IgG fraction antibody purified from monospecific antiserum by a multi-step process which includes delipidation, salt fractionation and ion exchange chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for mouse IL-6 protein. A BLAST analysis was used to suggest cross-reactivity with IL-6 from mouse sources based on 100% homology with the immunizing sequence. Cross-reactivity with IL-6 from other sources has not been determined.

Relevant Links:

- [UniProtKB - P08505](#)
- [NCBI - NP_112445.1](#)
- [GeneID - 16193](#)

Application Details

Tested Applications:	FC, IHC, WB
Application Note:	This purified antibody has been tested for use in western blotting against recombinant mouse IL-6 spiked into cell lysates. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 21.7 kDa in size corresponding to the mature 187 amino acid mouse IL-6 protein by western blotting in appropriate cell lysates or extracts.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IHC:	User Optimized
WB:	1:1000

Formulation

Physical State:	Lyophilized
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:	None
Stabilizer:	None
Reconstitution Volume:	100 µL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

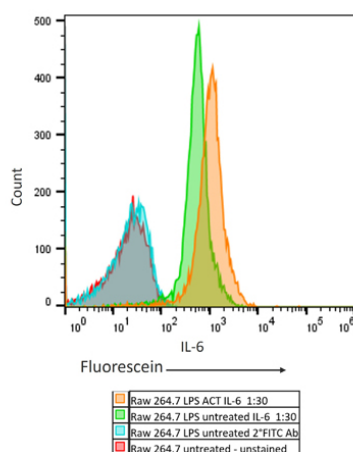
Shipping & Handling

Shipping Condition: Ambient

Storage Condition: Store anti-IL-6 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.

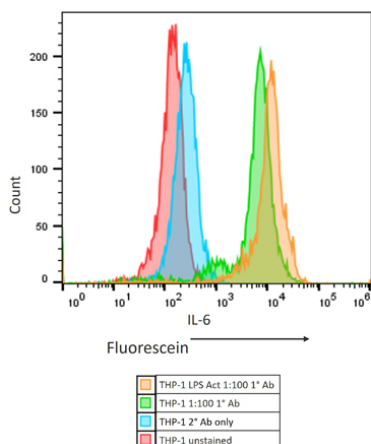
Expiration: Expiration date is six (6) months from date of receipt.

Images



Flow Cytometry

Flow Cytometry Results of Rabbit Anti-Mouse IL6 Antibody in mouse Raw 264.7 cell line. The orange histogram represents the Raw 264.7 murine cells that were activated with 100ng/mL LPS for 24 hours. The green histogram are untreated Raw 264.7 cells. These two populations were intracellularly stained for 30 minutes at 4°C in 1× BD Perm/Wash™ buffer. The primary stain was a 1:30 dilution of the Anti-Mouse IL-6 (RABBIT) Polyclonal Antibody (p/n 210-401-310, Lot#45055 [stock conc 1mg/mL]) and the secondary stain was the Anti-RABBIT IgG (H&L) (GOAT) Antibody Fluorescein Conjugated (p/n 611-1202 [1:400 dilution of 2mg/mL]). The secondary stain was for 30 minutes at 4°C and was kept protected from light. The blue histogram is the Raw 264.7 murine cells that were untreated and only stained with the secondary antibody. The red histogram is the untreated Raw 264.7 murine cells that were not stained. Prior to staining, the cells for all conditions were permeabilized with BD Fixation/Permeabilization™ solution for 20 minutes at 4°C. All washes and stains were performed in the BD 1× Perm/Wash™ buffer.

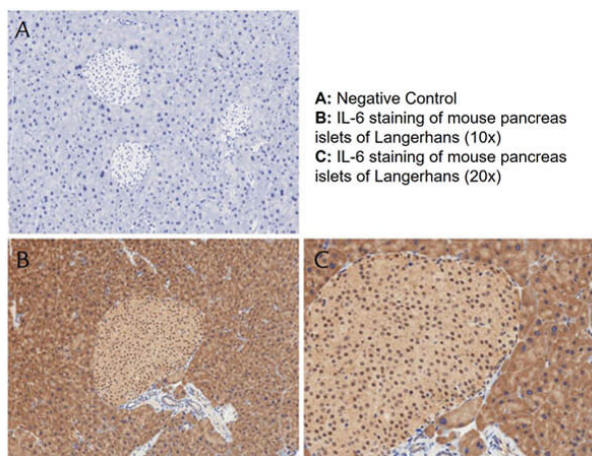


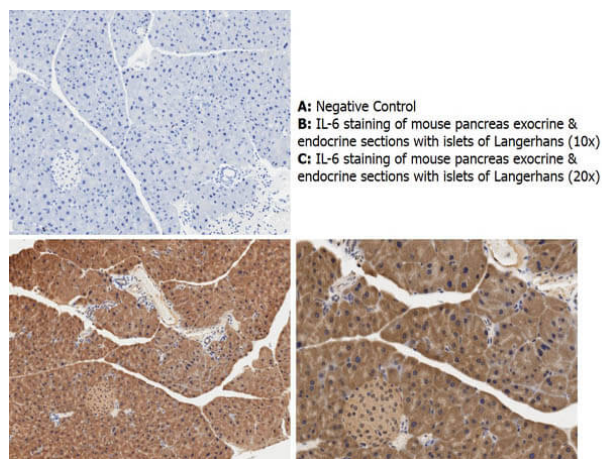
Flow Cytometry

Flow Cytometry Results of Rabbit Anti-Mouse IL6 Antibody in human THP-1 cell line. The orange histogram represents the THP-1 cells that were activated with 100ng/mL LPS for 24 hours. The green histogram are untreated THP-1 cells. These two populations were intracellularly stained for 30 minutes at 4°C in 1× BD Perm/Wash™ buffer. The primary stain was a 1:100 dilution of the Anti-Mouse IL-6 (RABBIT) Polyclonal Antibody (p/n 210-401-310, Lot# 45055 [stock conc 1mg/mL]) and the secondary stain was the Anti-RABBIT IgG (H&L) (GOAT) Antibody Fluorescein Conjugated (p/n 611-1202 [1:400 dilution of 2mg/mL]). The secondary stain was for 30 minutes at 4°C and was kept protected from light. The blue histogram is the THP-1 cells that were untreated and only stained with the secondary antibody. The red histogram is the untreated THP-1 cells that were not stained. Prior to staining, the cells for all conditions were permeabilized with BD Fixation/Permeabilization™ solution for 20 minutes at 4°C. All washes and stains were performed in the BD 1× Perm/Wash™ buffer.

Immunohistochemistry

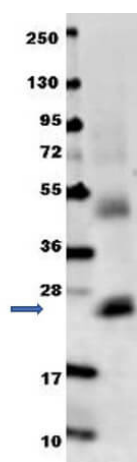
Immunohistochemistry with anti-IL-6 antibody showing positivity of islets of Langerhans (brown staining) and cytoplasmic staining in mouse pancreas at 10x and 20x (B & C). Staining was performed on Leica Bond system using the standard protocol. Formalin fixed/paraffin embedded tissue sections were subjected to antigen retrieval with E1 (Leica Microsystems) retrieval solution for 20 min and then incubated with rabbit anti-mouse IL-6 antibody at 1:50 dilution for 60 minutes. Biotinylated Anti-rabbit secondary antibody was used at 1:200 dilution to detect primary antibody. The reaction was developed using streptavidin-HRP conjugated compact polymer system and visualized with chromogen substrate, 3'3-diamino-benzidine substrate (DAB). The sections were then counterstained with hematoxylin to detect cell nuclei.





Immunohistochemistry

Immunohistochemistry with anti-IL-6 antibody showing cytoplasmic IL-6 staining in mouse pancreas exocrine and endocrine sections with islets of Langerhans at 10x and 20x (B & C). Staining was performed on Leica Bond system using the standard protocol. Formalin fixed/paraffin embedded tissue sections were subjected to antigen retrieval with E1 (Leica Microsystems) retrieval solution for 20 min and then incubated with rabbit anti-mouse IL-6 antibody at 1:50 dilution for 60 minutes. Biotinylated Anti-rabbit secondary antibody was used at 1:200 dilution to detect primary antibody. The reaction was developed using streptavidin-HRP conjugated compact polymer system and visualized with chromogen substrate, 3'3-diamino-benzidine substrate (DAB). The sections were then counterstained with hematoxylin to detect cell nuclei.



Western Blot

Anti-mouse IL-6 antibody in western blot shows detection of recombinant mouse IL-6 raised in E.coli. Recombinant truncated protein (0.1 µg, 21.7 kDa) was loaded on to an SDS-PAGE gel, and after separation, transferred to nitrocellulose. The membrane was blocked with 1% BSA in TBST for 30 min at RT, followed by incubation with Rockland's Anti-Mouse IL-6 antibody diluted 1:1,000 in 1% BSA in TBST overnight at 4°C. After washes, the blot was reacted with secondary antibody Dylight™ 649 Conjugated Anti-Rabbit IgG (H&L) (Goat) Antibody (p/n 611-143-122) diluted 1:20,000 in blocking buffer (p/n MB-070) for 30 min at RT. Data was collected using Bio-Rad VersaDoc® 4000 MP imaging system.

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.