

Datasheet for 209-301-310S**IL-6 Antibody****Overview**

Description:	Anti-Human IL-6 (MOUSE) Monoclonal Antibody - 209-301-310S
Item No.:	209-301-310S
Size:	25 µL
Applications:	ELISA, FC, Multiplex, WB
Reactivity:	Human
Host Species:	Mouse

Product Details

Background:	IL-6 is a secreted cytokine with a wide variety of biological functions. It is a potent inducer of the acute phase response and plays an essential role in the final differentiation of B-cells into Ig-secreting cells. Involved in lymphocyte and monocyte differentiation. IL-6 induces myeloma and plasmacytoma growth and induces nerve cells differentiation and acts on B-cells, T-cells, hepatocytes, hematopoietic progenitor cells and cells of the CNS. IL-6 also acts as a myokine. It is discharged into the bloodstream after muscle contraction and acts to increase the breakdown of fats and to improve insulin resistance. Anti-IL-6 antibody is ideal for investigators involved in Cancer, Neuroscience and Immunology research.
Synonyms:	mouse Anti-IL-6 antibody, mouse anti-interleukin-6 antibody, HSF, Hybridoma growth factor, Hybridoma plasmacytoma growth factor, IFNB2, IL 6, IL6 protein, Interferon beta 2, Interleukin 6, BSF2, CDF
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	33A12.G9
Format:	IgG1
Low Endotoxin:	Yes

Target Details

Gene Name:	IL6
Reactivity:	Human

Immunogen Type:	Recombinant Protein
Immunogen:	This Protein A purified monoclonal antibody was produced in mouse by repeated immunizations with mature full length recombinant human IL-6 produced in E.coli followed by hybridoma development.
Purity/Specificity:	This purified antibody detects recombinant and native IL-6 present in body fluids and cell supernatants in various assays (ie. IL-1 stimulated IL-6 production from fibroblasts). In Western blot analysis of natural cell products or human body fluids, multiple bands of IL-6 will appear due to the variable amount of glycosylation on the molecule.
Relevant Links:	• NCBI - NP_000591.1 • UniProtKB - P05231 • GeneID - 3569

Application Details

Tested Applications:	ELISA, FC, Multiplex, WB
Application Note:	Anti-IL 6 antibody has been tested for use in ELISA, Flow Cytometry, and western blotting. Reactivity is also expected in neutralizations, radioimmunoassay and immunohistochemistry. The endotoxin content is estimated to be <10 pg/μl by the LAL method. By western blot a band approximately 23.7 kDa in size corresponding to native human IL-6 protein is expected in the appropriate cell lysate or extract. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
FC:	0.5 mg/mL
WB:	1:1000

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

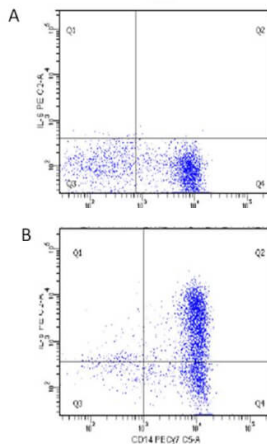
Shipping & Handling

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.

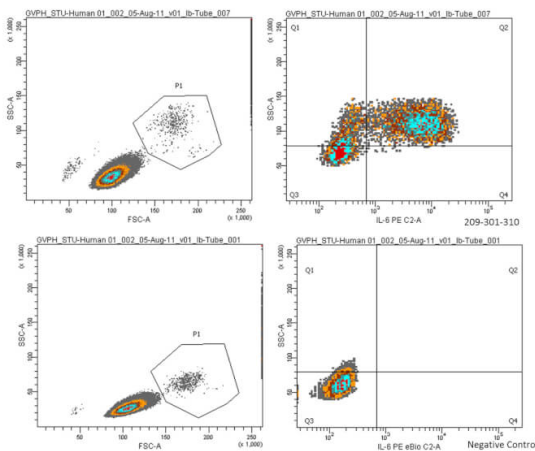
Expiration: Expiration date is three (3) months from date of receipt.

Images



Flow Cytometry

Flow Cytometry of Human anti-IL-6 antibody 209-301-310. Cells: human PBMC. Stimulation: Figure A: unstimulated; Figure B: 1 $\mu\text{g/mL}$ LPS in a protein transport inhibitor for 5 hours. Staining: (surface) x-axis: anti-CD14, (intracellular) y-axis: anti-IL-6.



Flow Cytometry

Anti-Human IL-6 Antibody - Flow Cytometry. Human PBMCs were stimulated with 1 $\mu\text{g/mL}$ LPS and a transport inhibitor for 4-5 hours. Cells were then suspended in fixation buffer for 10-12 minutes and vortexed briefly. 1 mL of permeabilization buffer was added. 0.5 mg of Anti-Human IL-6 Antibody was added (0.125 $\mu\text{g/mL}$ control antibody) and incubated in the dark for 30 minutes. 1:100 of strep/PE was added and incubated for 30 minutes. LPS-stimulated samples were compared to unstimulated cells stained with strep/PE.

**Western Blot**

Western Blot showing detection of Human IL-6. 100 ng of Human IL-6 was run on a 4-20% gel and transferred to 0.45 μ m nitrocellulose. After blocking with 1% BSA-TTBS (p/n MB-013, diluted to 1X) 30 min at 20°C, Anti-Human IL-6 (MOUSE) Antibody (p/n 209-301-310) was used at 1:1000 in 1% BSA-TTBS over night at 4°C. Peroxidase conjugated Rabbit Anti-mouse secondary antibody was used in Blocking Buffer for Fluorescent Western Blotting (p/n MB-070) at 1:40,000 for 30 min at 20°C and imaged using the Bio-Rad VersaDoc® 4000 MP. Band indicates correct 17 kDa molecular weight position expected for Human IL-6.

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.