

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

Description:	Anti-Human IL-6 (MOUSE) Monoclonal Antibody - 209-301-310
Item No.:	209-301-310
Size:	100 µg
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 IL-6 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:	• UniProtKB - P05231 • NCBI - NP_000591.1 • 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

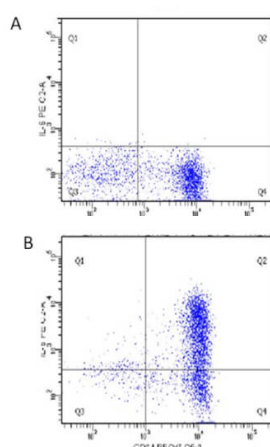
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store IL 6 antibody at -20°C . 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.

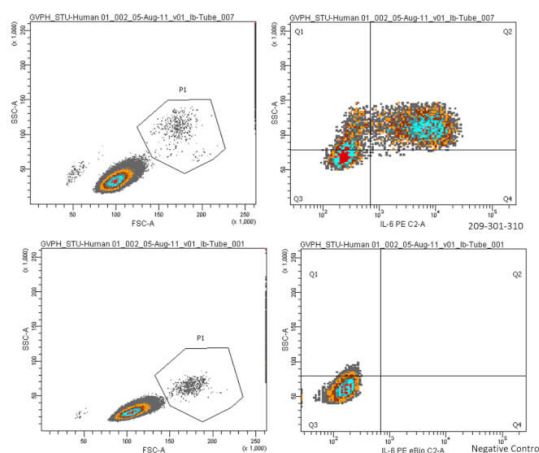
Expiration: Expiration date is one (1) year from date of receipt.

Images



Flow Cytometry

Flow Cytometry of Human anti-IL-6 antibody 209-301-310. Cells: human PBMC. Stimulation: Figure A: unstimulated; Figure B: 1 µg/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 1ug/mL LPS and a transport inhibitor for 4-5 hours. Cells were then suspended in fixation buffer for 10-12 minutes and vortexed briefly. 1mL of permeabilization buffer was added. 0.5mg of Anti-Human IL-6 Antibody was added (0.125 ug/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.

References

- Seok E et al. Interleukin-6 secreted by tumor-associated macrophages promotes proliferation and migration through JAK2/STAT3 signaling pathway in human prostate cancer cells. *Prostate Int.* (2026)

Disclaimer

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