

Datasheet for 209-401-310**IL-6 Antibody****Overview**

Description:	Anti-Human IL-6 (RABBIT) Antibody - 209-401-310
Item No.:	209-401-310
Size:	100 µg
Applications:	IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Anti-IL-6 antibody is validated by ELISA, Immunohistochemistry and Western Blot Assays. 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.
Synonyms:	rabbit Anti-IL-6 antibody, rabbit 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:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	IL6
Reactivity:	Human
Immunogen Type:	Recombinant Protein

Immunogen:	This purified antibody was prepared from whole rabbit serum produced by repeated immunizations with mature length recombinant human IL-6 produced in E.coli.
Purity/Specificity:	IL-6 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. The antiserum is also useful for neutralization of human IL-6 activity in bioassays. For neutralization, incubate the sample with a 1:400 dilution of the antiserum for at least 4 hours before being tested. A control of similarly diluted normal rabbit IgG (heat inactivated) is recommended. In neutralization experiments in vitro, this antibody does not result in enhanced activity of IL-6. However, because antibodies to IL-6 may act as a soluble receptor in vivo, some antibodies to IL-6 act as carriers and enhance IL-6 activity. This product has minimal reactivity with mouse IL-6.
Relevant Links:	• NCBI - NP_000591.1 • UniProtKB - P05231 • GeneID - 3569

Application Details

Tested Applications:	IHC, WB
Application Note:	This purified antibody has been tested for use in IHC and western blotting. Reactivity is also expected in ELISA, 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
IHC:	1:200 - 1:1,000
Neutralization:	Yes
WB:	1:300 - 1:1,000

Formulation

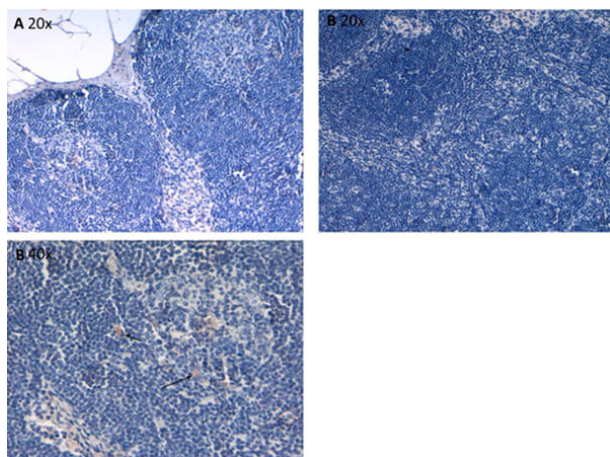
Physical State:	Lyophilized
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative:	None
Stabilizer:	None
Reconstitution Volume:	100 μ L
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

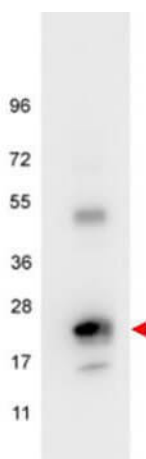
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for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



Immunohistochemistry

Immunohistochemistry of Rabbit Anti-IL6-Antibody. Tissue: human lymph nodes at pH9. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Anti-IL-6 antibody at 10 μ g/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: IL-6 is cytoplasmic. Staining: IL-6 as precipitated brown signal (B 20x, B 40x) hematoxylin purple nuclear counterstain. Negative Control (A 20x).



Western Blot

Western blot using Rockland's anti-Human IL6 antibody shows detection of a band ~24 kDa in size corresponding to recombinant human IL6 (arrowhead). Molecular weight markers are also shown. After transfer, the membrane was blocked overnight with 1% BSA in TTBS followed by reaction with primary antibody at a 1:500 dilution. Detection occurred using HRP conjugated anti-Rabbit IgG (p/n 611-103-122) secondary antibody diluted 1:40,000 in blocking buffer (p/n MB-070) and FemtoMax™ Chemiluminescent substrate (p/n FEMTOMAX-110). Image was captured using VersaDoc MP 4000 imaging system (Bio-Rad).

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

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.