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Datasheet for 109-401-310S

IL-6 Antibody

Overview

Description:	Anti-Human IL-6 (RABBIT) Antibody - 109-401-310S
Item No.:	109-401-310S
Size:	25 µL
Applications:	Dot Blot, WB, IHC
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Anti-IL-6 Antibody recognizes human IL-6 that is a secreted cytokine with a wide variety of biological functions. IL-6 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, hematopoeitic 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-IL6 antibody is ideal for investigators involved in Immunology and Cancer research.
Synonyms:	HSF, Hybridoma growth factor, HGF, Hybridoma plasmacytoma growth factor, IL 6, IL6 protein, IFNB2, Interferon beta 2, BSF2, CDF, B-Cell Differentiation Factor, B-cell stimulatory factor 2, CTL differentiation factor, rabbit anti-Interleukin 6 Antibody, rabbit anti-IL-6
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

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

Immunogen:	This whole rabbit serum was prepared by repeated immunizations with recombinant human IL-6 produced in E.coli.
Purity/Specificity:	Anti-IL-6 antiserum detects recombinant and native human IL-6 present in body fluids and cell supernatants in various assays (ie. IL-1 stimulated IL-6 production from fibroblasts). This product has minimal reactivity with mouse IL-6.
Relevant Links:	• GeneID - 3569 • NCBI - NP_000591.1 • UniProtKB - P05231

Application Details

Tested Applications:	Dot Blot, WB
Suggested Applications:	IHC (Based on references)
Application Note:	IL-6 antibody has been tested in western blot. This antibody is suitable for use in neutralizations, ELISA, radioimmunoassay, and immunoprecipitation. Reactivity in other immunoassays is unknown. Expect ~23.7kDa. 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. For immunoblot use the supernatants or lysates of 2 x 106 endotoxin-stimulated human peripheral blood mononuclear cells (PBMC). PBMC are stimulated for 24 hours with 1% (v/v) human serum plus 10ng/mL E. coli LPS. For immunoprecipitation, pre-clearing with a non-specific rabbit IgG is helpful to reduce background. The antiserum is useful for neutralization of human of 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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:1,000 - 1:5,000
IHC:	1:400 - 1:800
IP:	1:400 - 1:800
Neutralization:	1:400
WB:	1:500 - 1:2,000

Formulation

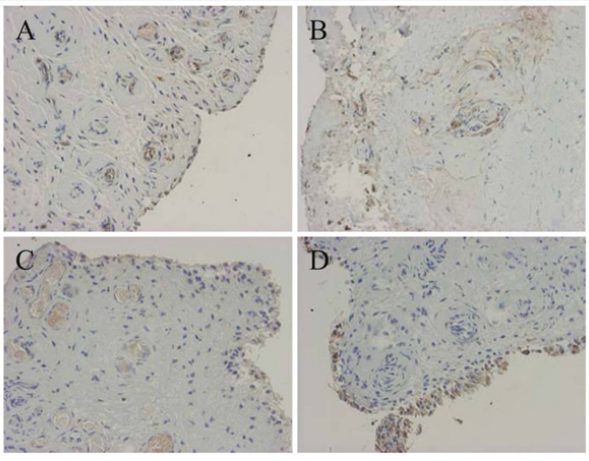
Physical State:	Liquid (sterile filtered)

Concentration:	80 mg/mL by Refractometry
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	None
Stabilizer:	None

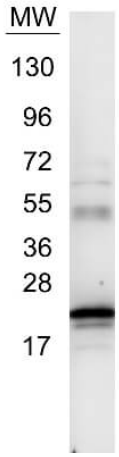
Shipping & Handling

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 one (1) year from date of receipt.

Images

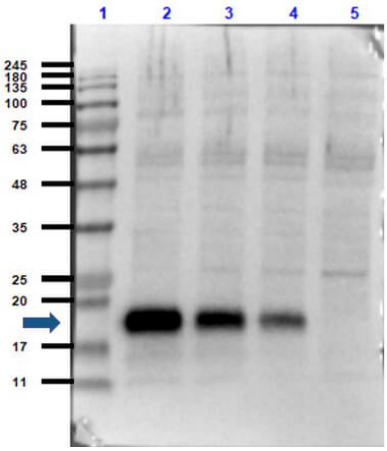


Immunohistochemistry
Immunohistochemical (H&E) examination of synovial tissues in a frozen shoulder.
10 mM sodium citrate buffer (pH 6.4)
(A) Matrix metalloproteinase-3 (1: 100). (B) Interleukin-6 (1: 6000). (C) Vascular endothelial growth factor (1: 800). (D) CD68 (1: 1000). (×200)
Fig 2. PMID: 19214689



Western Blot

Western blot using Rockland's Anti-IL6 antibody. Protein was resolved on a 4-20% Tris-Glycine gel by SDS-PAGE and transferred onto nitrocellulose. The blot shows detection of a band ~21 kDa in size corresponding to anti-IL6 antibody. Molecular weight markers are also shown (MW). After transfer, the membrane was blocked for 30 minutes with 1% BSA-TBST. Detection occurred using peroxidase conjugated Goat anti-Rabbit IgG (p/n 611-103-122) secondary antibody diluted 1:40,000 in blocking buffer (p/n MB-070) for 30 min at RT followed by reaction with FemtoMax™ chemiluminescent substrate. Image was captured using VersaDoc™ MP 4000 imaging system (Bio-Rad).



Western Blot

Western Blot of Rabbit Anti-IL-6 Antibody. Lane 1: Opal Prestained Molecular Weight Marker (p/n MB-210-0500). Lane 2: Human Rec. IL-6/HeLa Whole Cell Lysate [0.05µg/10µg]. Lane 3: Human Rec. IL-6/HeLa Whole Cell Lysate [0.02µg/10µg]. Lane 4: Human Rec. IL-6/HeLa Whole Cell Lysate [0.01µg/10µg]. Lane 5: HeLa Whole Cell Lysate (p/n W09-000-364) [10µg]. Primary Antibody: Anti-IL-6 at 1:1000 overnight at 2-8°C. Secondary Antibody: Goat Anti-Rabbit IgG HRP conjugate (p/n 611-103-122) at 1:70,000 for 30mins at RT. Block: BlockOut Buffer (p/n MB-073). Predicted MW: ~23kDa. Observed MW: ~19 Exposure: 2 seconds.

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