

PRODUCT INFORMATION



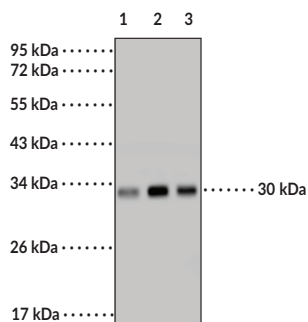
Interleukin-6 Monoclonal Antibody (Clone 19)

Item No. 33947

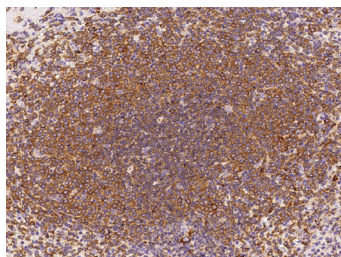
Overview and Properties

Contents:	This vial contains 200 µl of protein A-purified monoclonal antibody.
Synonyms:	B Cell Stimulatory Factor 2, BSF-2, CDF, CTL Differentiation Factor, HGF, HSF, Hybridoma Growth Factor, IFN-β-2, IL-6, Interferon β-2
Immunogen:	Recombinant human IL-6 protein
Cross Reactivity:	(+) IL-6
Species Reactivity:	(+) Human
Form:	Liquid
Storage:	-80°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Clone:	19
Host:	Mouse
Isotype:	IgG1
Applications:	Immunohistochemistry (IHC) and Western blot (WB). The recommended starting dilution is 1:30-1:100 for IHC and 1:500-1:2,000 for WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

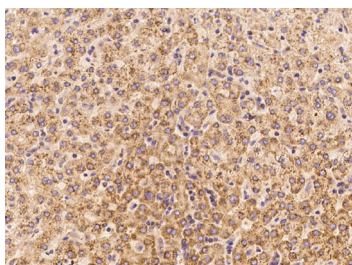
Images



Lane 1: A549 whole cell lysate (30 µg)
Lane 2: HeLa whole cell lysate (30 µg)
Lane 3: HepG2 whole cell lysate (30 µg)



Immunohistochemical staining of formalin-fixed and paraffin-embedded human IL-6 in human spleen using Interleukin-6 Monoclonal Antibody (Clone 19) at a dilution of 1:60.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human IL-6 in human liver using Interleukin-6 Monoclonal Antibody (Clone 19) at a dilution of 1:60.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/17/2024

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM

PRODUCT INFORMATION



Description

IL-6 is a cytokine with roles in both the initiation and resolution of inflammatory responses.^{1,2} IL-6 is produced in response to an inflammatory event, induces recruitment of neutrophils to the site of inflammation, and signals through the membrane-bound IL-6 receptor (IL-6R) to upregulate the synthesis of acute phase proteins, lipolysis in the liver, and induced differentiation of T and B cells. Following initiation of this classical signaling pathway, a soluble form of IL-6R (sIL-6R) is released from neutrophils to promote recruitment of monocytes and macrophages, induction of fever *via* IL-6 action in the hypothalamus, and production of anti-inflammatory M2 macrophages to initiate tissue repair. Production of IL-6 is dysregulated in various chronic inflammatory diseases, including rheumatoid arthritis, Castleman disease, polymyalgia rheumatica, and giant cell arteritis.³ It also induces tumor growth and metastasis *via* activation of JAK/STAT signaling.⁴ Cayman's Interleukin-6 Monoclonal Antibody (Clone 19) can be used for immunohistochemistry (IHC) and Western blot (WB) applications. The predicted size of IL-6 is 24 kDa and this antibody recognizes IL-6 at an observed band size of 30 kDa from human samples.

References

1. Del Giudice, M. and Gangestad, S.W. Rethinking IL-6 and CRP: Why they are more than inflammatory biomarkers, and why it matters. *Brain Behav. Immun.* **70**, 61-75 (2018).
2. Rose-John, S. Interleukin-6 family cytokines. *Cold Spring Harb. Perspect. Biol.* **10**(2), a028415 (2018).
3. Schett, G. Physiological effects of modulating the interleukin-6 axis. *Rheumatology (Oxford)* **57**(suppl_2), ii43-ii50 (2018).
4. Lacina, L., Brábek, J., Král, V., *et al.* Interleukin-6: A molecule with complex biological impact in cancer. *Histol. Histopathol.* **34**(2), 125-136 (2019).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM