

PRODUCT INFORMATION



Interleukin-6 Rabbit Monoclonal Antibody (Clone 076)

Item No. 37068

Overview and Properties

Contents:	This vial contains 50 or 100 µl of protein A-affinity 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 mouse IL-6
Cross Reactivity:	(+) IL-6
Species Reactivity:	(+) Mouse
Form:	Liquid
Storage:	-80°C (as supplied)
Stability:	≥1 year
Storage Buffer:	0.2 µm filtered solution in PBS
Clone:	076
Host:	Rabbit
Isotype:	IgG
Applications:	ELISA; the recommended starting dilution is 1:5,000-1:10,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Description

Interleukin-6 (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 IL-6 Rabbit Monoclonal Antibody (Clone 076) can be used for ELISA.

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).

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.

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