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).

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