

Anti-IL-6 [mAB1339 (OP-R003-1)] Standard Size, 200 µg, Ab02025-10.0 View online

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This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Kappa

Clone Number: mAB1339 (OP-R003-1)

**Alternative Name(s) of Target:** IL6; IFNB2; BSF-2; CDF; Interleukin-6; IL-6; B-cell stimulatory factor 2; CTL differentiation factor; Hybridoma growth factor; Interferon beta-2; IFN-beta-2

UniProt Accession Number of Target Protein: P05231

Published Application(s): Blocking, therapeutic, ELISA, FC

Published Species Reactivity: Human

**Immunogen:** The original antibody was generated from its murine parent antibody B-E8 by creating sunstituional variants and their affinity maturation using phage display techniques

**Specificity:** This antibody recognizes and binds the interleukin-6 at amino acid residues that are crucial for binding to human IL-6R. The binding of this antibody blocks or inhibits the binding between human IL6 and human IL-6R.

**Application Notes:** This high affinity, fully human antagonistic monoclonal antibody mAb 1339 or OP-R003-1 was structurally derived from elsilimomab (B-E8, a murine anti-IL-6 mAb). In vitro studies demonstrated that mAb 1339 shares similar biological properties, including affinity and epitope specificity with its "parent" murine antibody. mAb 1339 detected human and monkey IL-6 but not murine or rat IL-6. No binding was observed with other IL-6 superfamily members. The binding affinity of this antibody to IL-6 was tested using ELISA. This fully human mAb inhibited the binding of IL-6 to its receptor as evidenced by flow cytometry using U266 cells and also inhibited IL-6 induced cell proliferation in murine B9, human TF1 or U266 cells (Vermot-Desroches et al., 2007). mAb 1339 inhibited the growth of multiple myeloma in presence of BMSC vitro, associated with inhibition of phosphorylation of STAT3, ERK1/2 and Akt and synergistically enhanced the cytotoxic activity of dexamethasone as well as bortezomib, lenalidomide, and perifosine. It also significantly enhanced growth inhibitory effects of dexamethasone in vivo in a SCID-hu mouse model of multiple myeloma (PMID: 19934301)

**Antibody First Published in:** Vermot-Desroches et al. In Vitro Characterization of OP-R003-1, a New Fully Human Anti-IL6 Antibody. Blood (2007); 110 (11); 4522. PMID:

Note on publication: Describes the in vitro characterization of the antibody.

## Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at - 20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic

procedures for humans or animals.