Recombinant anti-human interleukin-6 antibody (clone 12C1)

Catalogue #	R1-646-100
Immunogen:	Recombinant hIL-6 protein
Immunogen Description:	Recombinant human IL-6 protein produced by CHO-based Icosagen Cell factory Ltd. proprietary suspension cell line.
Alternative Names:	Interleukin-6, IL6, IL-6, B-cell stimulatory factor 2, BSF-2, CTL differentiation factor, CDF, interferon beta-2, IFN-beta-2
Uniprot ID:	P05231
Clonality:	Human monoclonal
Clone:	12C1
Class:	hIgG1
Reactivity:	Binds to human IL-6. Lack of cross-reactivity to IL-1?, IL-1?, IL-2, IL-3, IL-4, IL-8, IFN? and TNF? proteins was confirmed with Octet.
Application:	ELISA, CLIA
Protocol:	Monoclonal antibody working amount has to be established practically for each particular antigen and assay format.
Buffer:	PBS pH 7.4
Related Products:	IL-6 antibody clone 12C1 has been identified as a recommended capture antibody with clone 2G12 (cat# R1-641-100) and clone 2A10 (cat# R1-640-100). The antibody pair 12C1–2G12 was additionally validated using serum samples collected from sepsis patients.
Shipping:	Shipping on dry ice.
Storage:	Store in -65...-85 °C. Avoid multiple freeze-thaw cycles.
Background:	Human interleukin-6 (IL-6) is a cytokine secreted by a broad spectrum of cells such as innate immune cells, B cells, endothelial cells,

fibroblasts, astrocytes, epithelial cells, and several malignant cells. It is produced in response to tissue damage or environmental stress, microbial products, viruses or other proinflammatory cytokines. IL-6 is involved in a variety of physiological processes, including the regulation of immune response, inflammation, metabolism, bone metabolism, cancer development and progression. Elevated IL-6 concentrations are associated with several inflammatory diseases and malignancies, e.g., multiple myeloma, rheumatoid arthritis, Crohn's disease, cardiovascular diseases and osteoporosis. In addition, increased levels of IL-6 have been observed in severe cases of COVID-19. Therefore, monitoring IL-6 levels may provide useful information for disease prognosis and management.

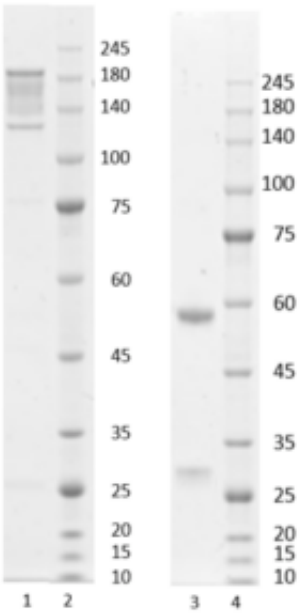

Figure 1. Simply Blue Safe stained SDS-PAGE analysis of recombinant anti-human interleukin-6 antibody, clone 12C1. 4-12% gel is used for analysis. Lane 1. Recombinant anti-human interleukin-6 antibody, clone 12C1 (-DTT) Lane 2. Size marker Lane 3. Recombinant anti-human interleukin-6 antibody, clone 12C1 (+DTT) Lane 4. Size marker

Peak Table

Peak #	RT (min)	Area	Area %
1	8.897	5162.46	100.00

Chromatogram

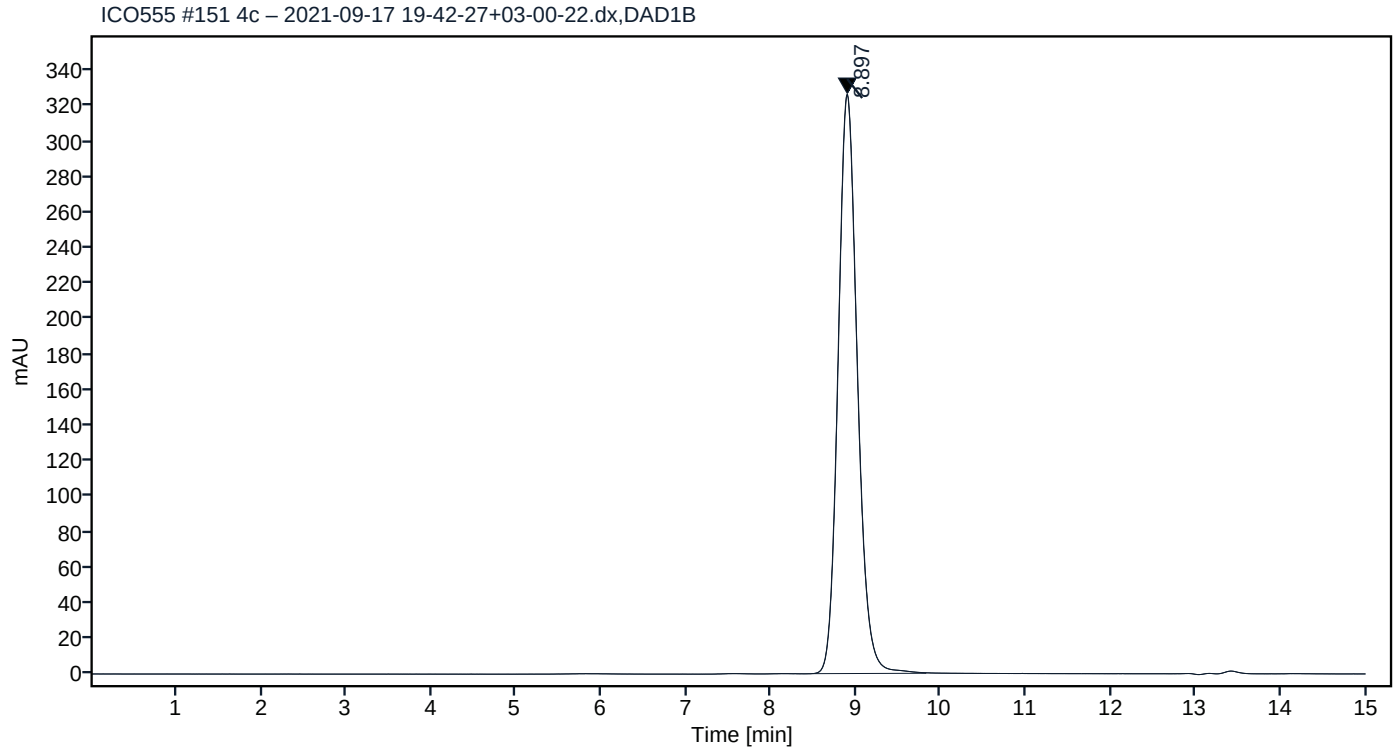

Figure 2. HPLC analytical SEC for final product.

Peak Table

Peak #	RT (min)	Area	Area %
1	8.908	4926.33	100.00

Chromatogram

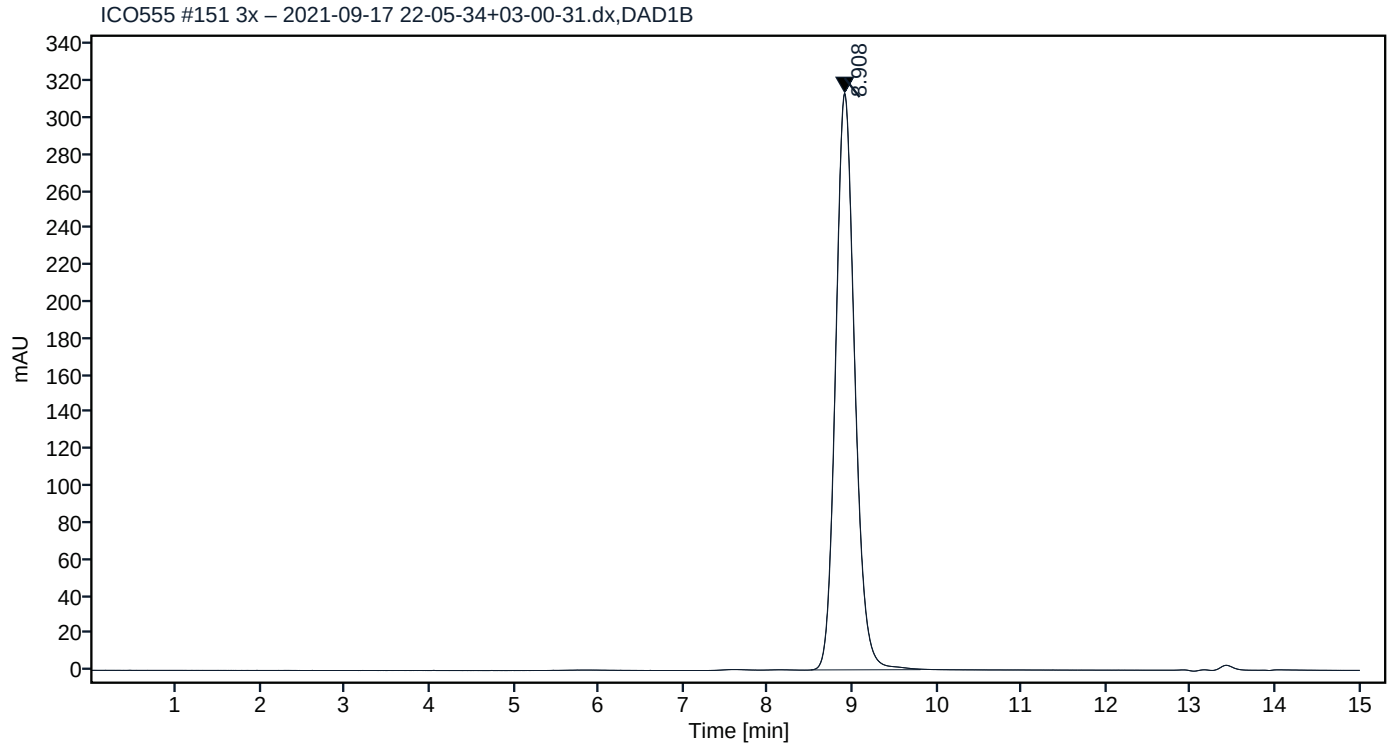

Figure 3. HPLC analytical SEC after 3 freeze-thaw cycles.

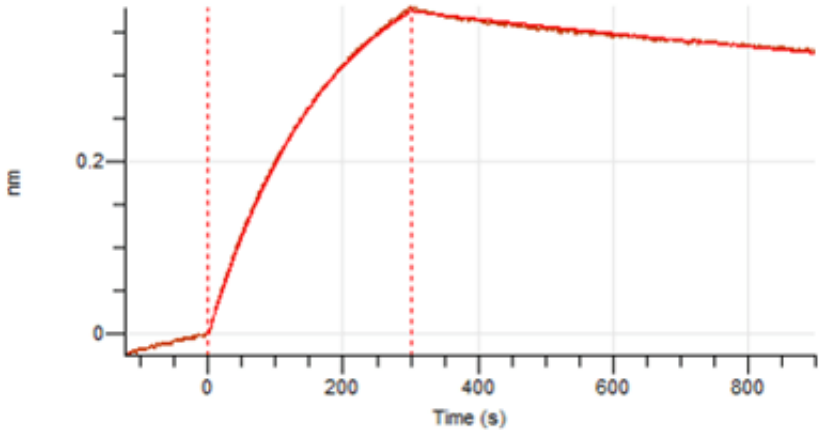

Figure 4. Octet BLI analysis, antibody was loaded on sensor for capture of IL-6 protein

(for reference only; data shown are from a single production batch at release and may not be representative of other batches)