

HUMAN IL6 PROTEIN, MFC-HIS TAG

Cat.#: 11160

Product Name: Human IL6 Protein

Size: 10 µg, 50 µg and 100 µg

Synonyms: IL6;Interleukin-6;BSF2;HSF;IFNB2

Target: IL6

UNIPROT ID: P05231

Description: Recombinant human IL6 protein with C-terminal mouse Fc and 6xHis tag

Background: This gene encodes a cytokine that functions in inflammation and the maturation of B cells. In addition, the encoded protein has been shown to be an endogenous pyrogen capable of inducing fever in people with autoimmune diseases or infections. The protein is primarily produced at sites of acute and chronic inflammation, where it is secreted into the serum and induces a transcriptional inflammatory response through interleukin 6 receptor, alpha. The functioning of this gene is implicated in a wide variety of inflammation-associated disease states, including susceptibility to diabetes mellitus and systemic juvenile rheumatoid arthritis. Alternative splicing results in multiple transcript variants.

Species/Host: HEK293

Molecular Weight: The protein has a predicted molecular mass of 47.9 kDa after removal of the signal peptide.

Molecular Characterization: IL6(Val30-Met212) mFc(Pro99-Lys330) 6xHis tag

Purity: The purity of the protein is greater than 95% as determined by SDS-PAGE and Coomassie blue staining.

Formulation & Reconstitution: Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

Storage & Shipping: Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

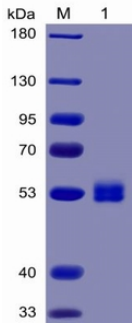


Figure 1. Human IL6 Protein, mFc-His Tag on SDS-PAGE under reducing condition.

Human IL6, mFc-His Tagged protein ELISA

0.2 µg of Human IL6, mFc-His Tagged protein per well

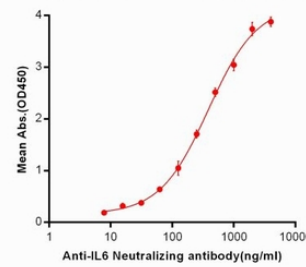


Figure 2. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human IL6, mFc-His tagged protein (11160) can bind Anti-IL6 Neutralizing antibody 28016 in a linear range of 7.81-386.8 ng/ml.

Human IL6, mFc-His Tagged protein ELISA

0.2 µg of IL6R, His Tagged protein per well

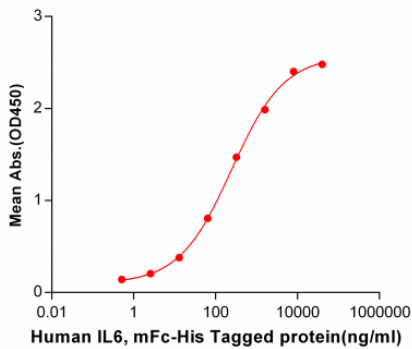
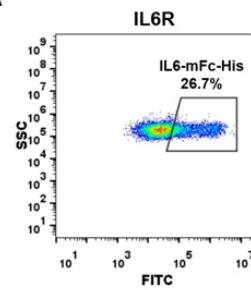


Figure 3. ELISA plate pre-coated by 2 µg/ml (100 µl/well) Human IL6R, His tagged protein 12284 can bind Human IL6, mFc-His tagged protein (11160) in a linear range of 0.512-40000 ng/ml.

A



B

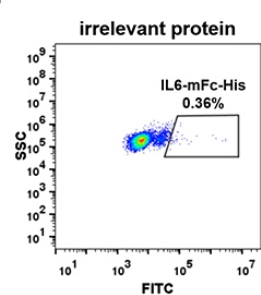


Figure 4. HEK293 cell line transfected with irrelevant protein (B) and human IL6R (A) were surface stained with Human IL6, mFc-His tagged protein (11160) 1µg/ml followed by Alexa 488-conjugated anti-mouse IgG secondary antibody.

Human IL6, mFc-His tagged protein ELISA

0.1 µg of Human IL6R, hFc tagged protein per well

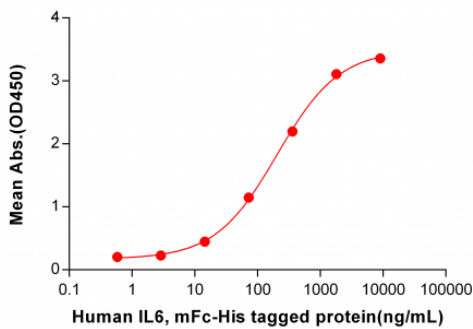


Figure 5. ELISA plate pre-coated by 1 µg/ml (100 µl/well) Human IL6R, hFc tagged protein 11335 can bind Human IL6, mFc-His tagged protein (11160) in a linear range of 14.4-360 ng/ml.