

## PRODUCT INFORMATION

<b>Target</b>	IL-4
<b>Synonyms</b>	Interleukin-4;IL-4;B-Cell Stimulatory Factor 1;BSF-1;Binetrakin;Lymphocyte Stimulatory Factor 1;Pitrakinra;IL4
<b>Description</b>	Recombinant Human Interleukin-4 is produced by our Mammalian expression system and the target gene encoding His25-Ser153 is expressed with a Fc tag at the C-terminus.
<b>Delivery</b>	In Stock
<b>Uniprot ID</b>	P05112
<b>Expression Host</b>	HEK293
<b>Tag</b>	C-Fc Tag
<b>Molecular Characterization</b>	Not available
<b>Molecular Weight</b>	41.9 KDa
<b>Purity</b>	Greater than 95% as determined by reducing SDS-PAGE.
<b>Formulation &amp; Reconstitution</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
<b>Storage&amp;Shipping</b>	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.
<b>Background</b>	Interleukin-4 (IL-4) is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. IL-4 is produced by mast cells, T cells, and bone marrow stromal cells. IL-4 regulates the differentiation of naive CD4 T cells into helper Th2 cells, characterized by their cytokine-secretion profile that includes secretion of IL-4, IL-5, IL-6, IL-10, and IL-13, which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergic response.
<b>Usage</b>	Research use only
<b>Conjugate</b>	Unconjugated



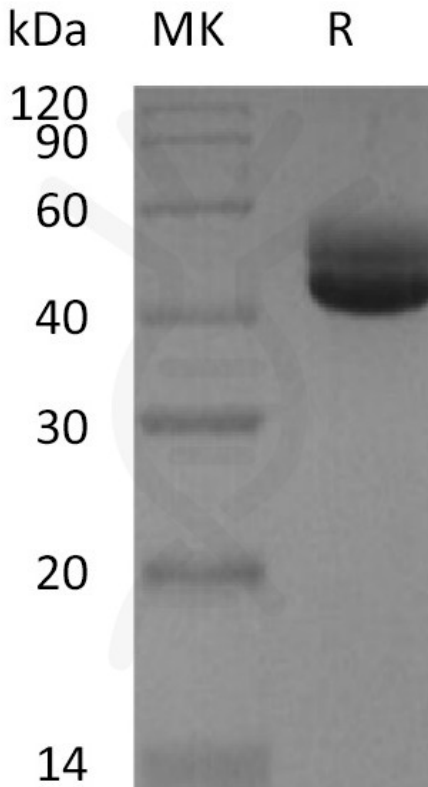


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.

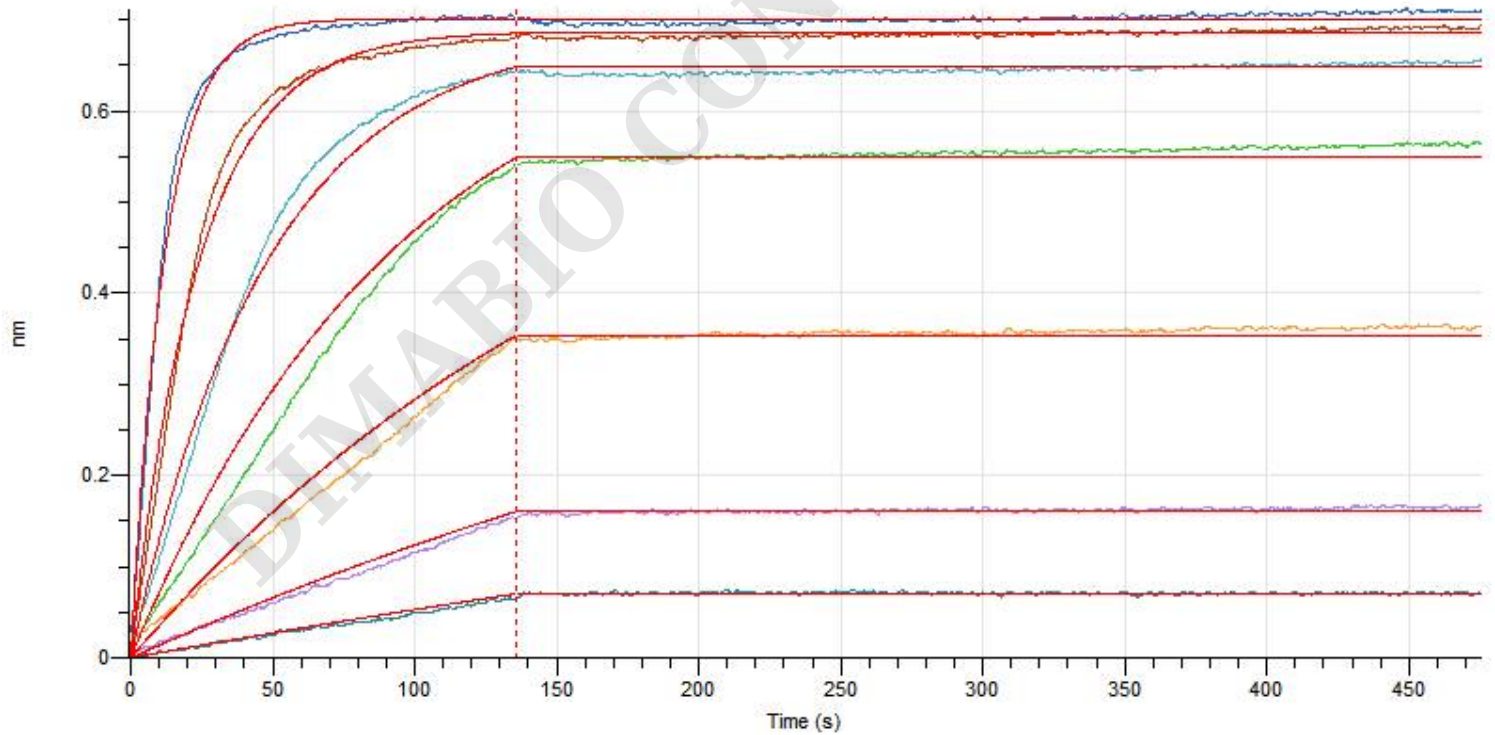


Figure 2. Loaded Cynomolgus IL-4RA-His on HIS1K Biosensor, can bind Human IL-4-Fc with an affinity constant of  $<10^{-3}$  nM as determined in BLI assay.



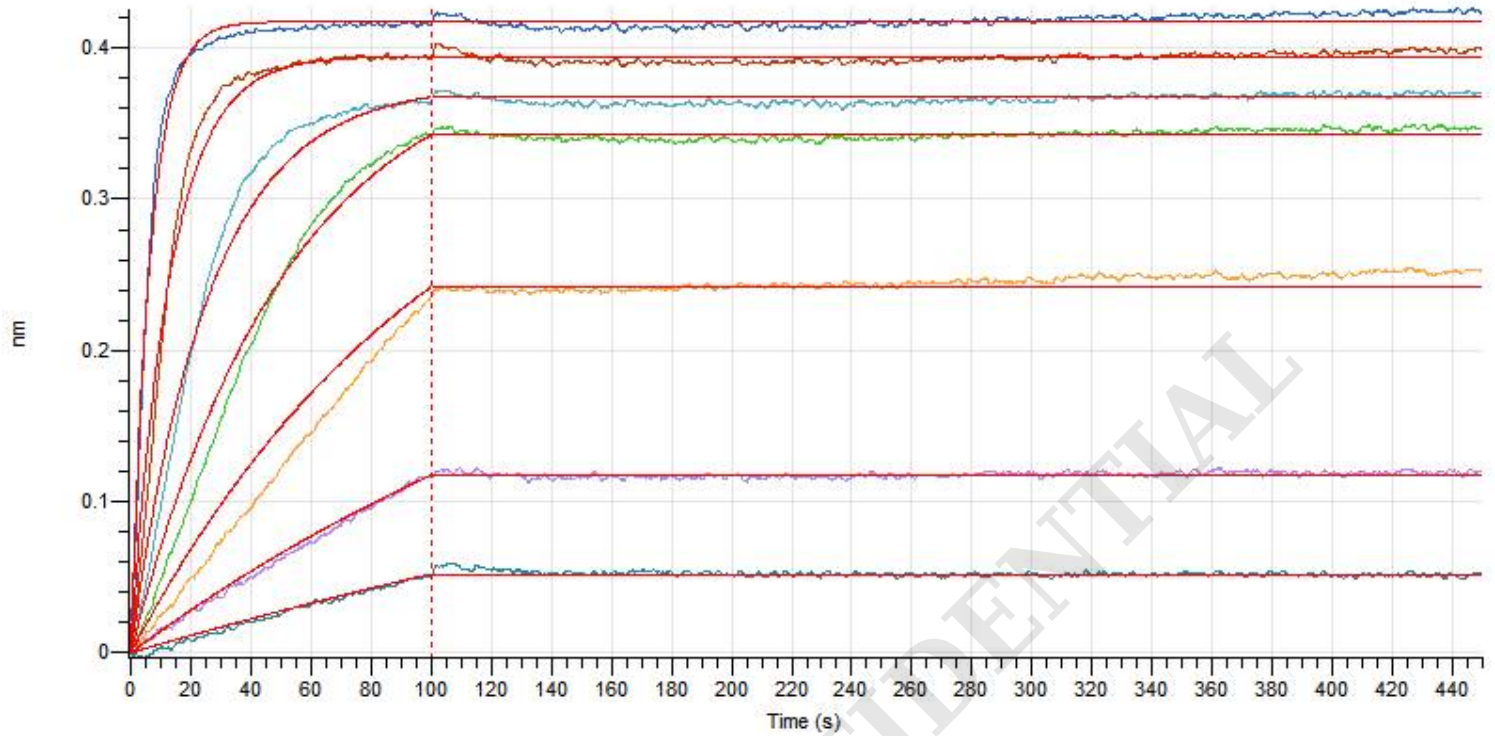


Figure 3. Loaded Human IL-4RA-His on HIS1K Biosensor, can bind Human IL-4-Fc with an affinity constant of  $<10^{-3}$  nM as determined in BLI assay.

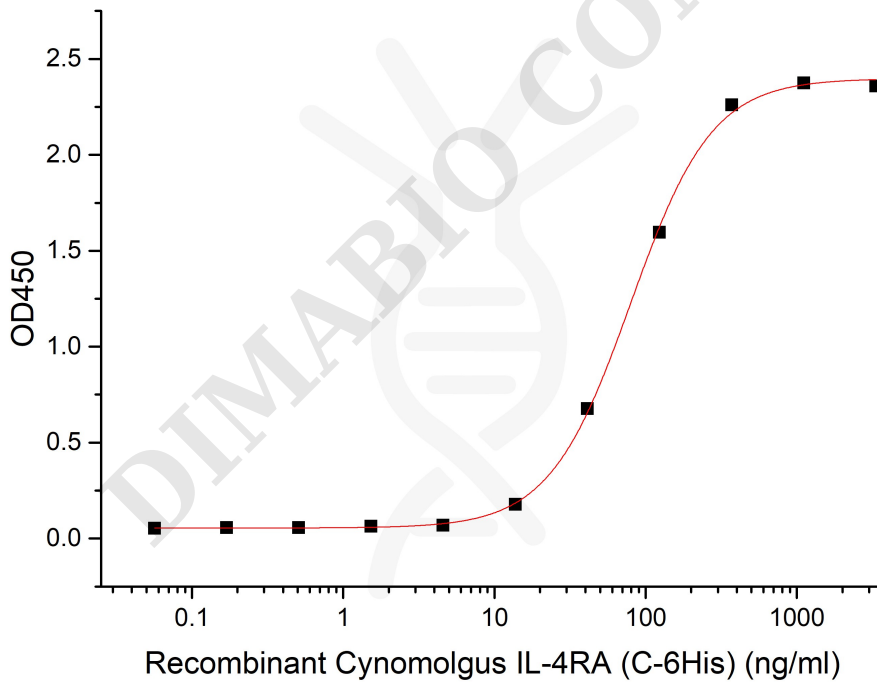


Figure 4. Immobilized Human IL-4-Fc at 5 $\mu$ g/ml (100  $\mu$ l/well) can bind Cynomolgus IL-4Ra-His. The ED50 of Recombinant Human IL-4Ra-His is 79.49 ng/ml.

