PRODUCT INFORMATION

Target	IL-4
Synonyms	Interleukin-4;IL-4;B-Cell Stimulatory Factor 1;BSF-1;Binetrakin;Lymphocyte Stimulatory Factor 1;Pitrakinra;IL4
Description	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.
Delivery	In Stock
Uniprot ID	P05112
Expression Host	HEK293
Tag	C-Fc Tag
Molecular Characterization	Not available
Molecular Weight	41.9 KDa
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Formulation & Reconstitution	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
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.
Sterility	Products are supplied non-sterile. For cell culture applications, dilute in appropriate medium and sterile-filter (0.22 μm) prior to use.
Background	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.
Usage	Research use only
Conjugate	Unconjugated

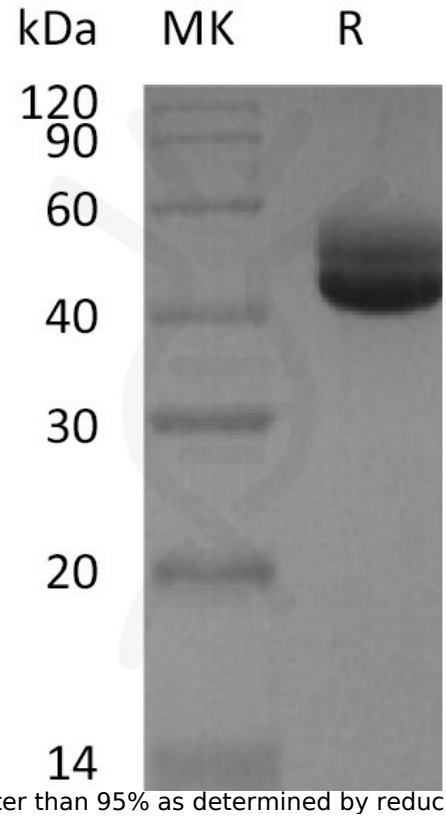

Figure 1. Greater than 95% as determined by reducing SDS-PAGE.

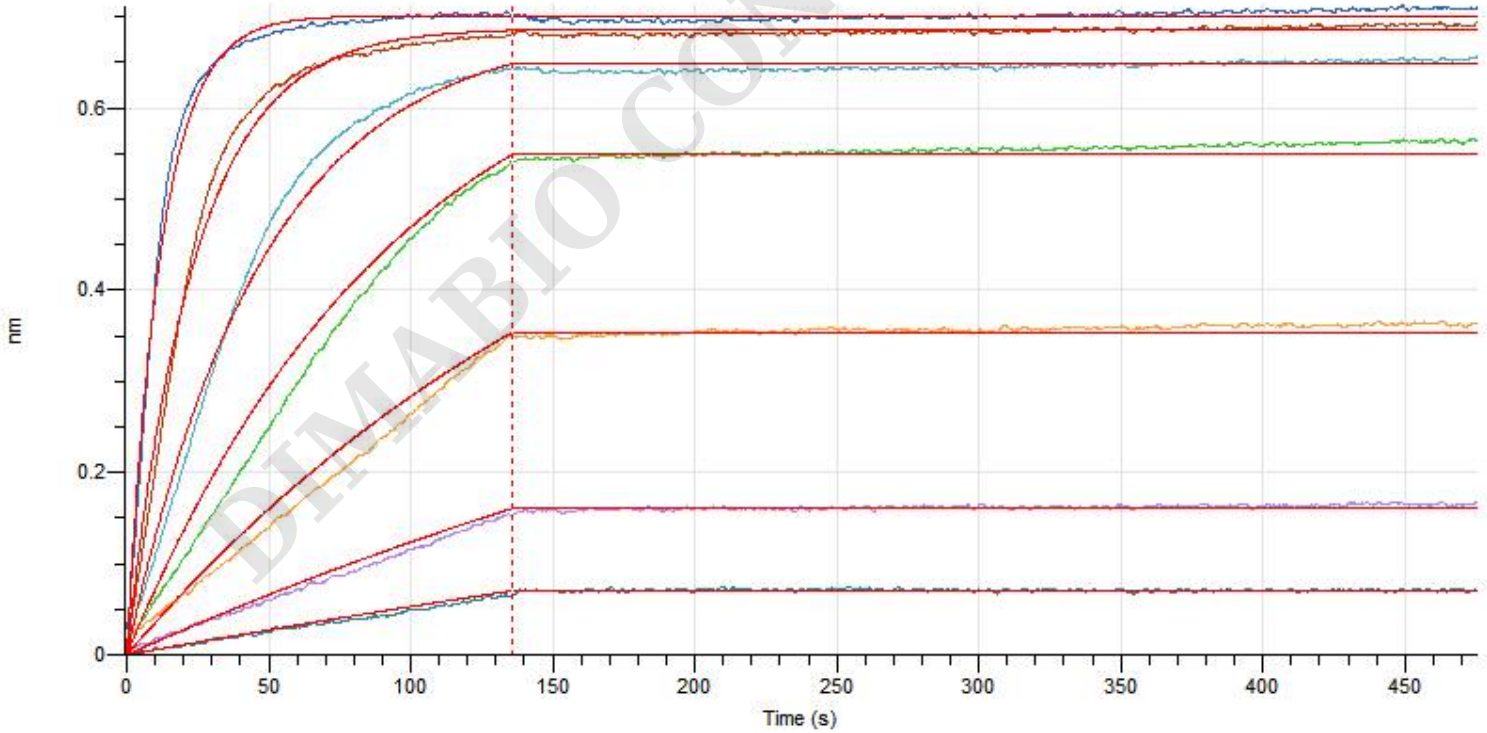

Figure 2. Loaded Cynomolgus IL-4RA-His on HIS1K Biosensor, can bind Human IL-4-Fc with an affinity constant of <10-3 nM as determined in BLI assay.

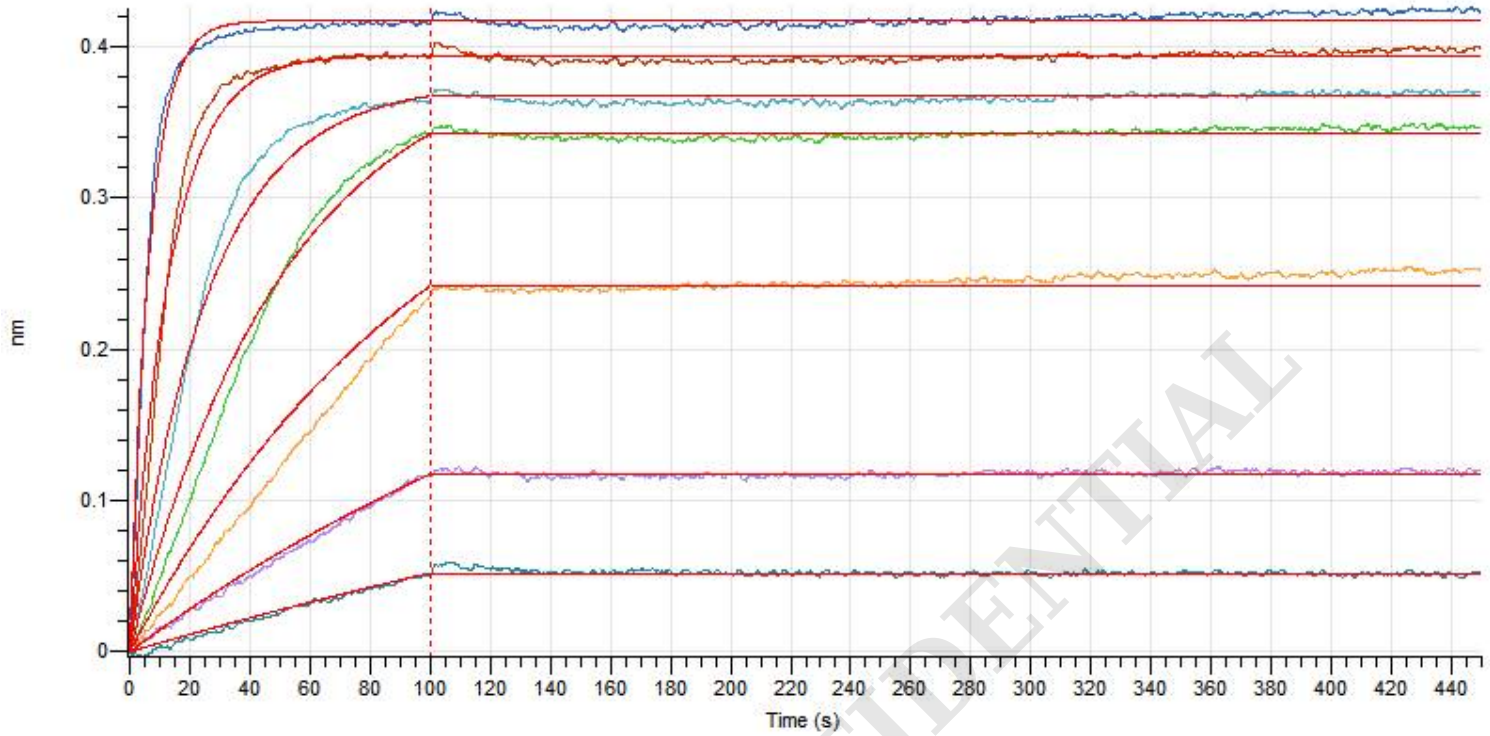

Figure 3. Loaded Human IL-4RA-His on HIS1K Biosensor, can bind Human IL-4-Fc with an affinity constant of <10-3 nM as determined in BLI assay.

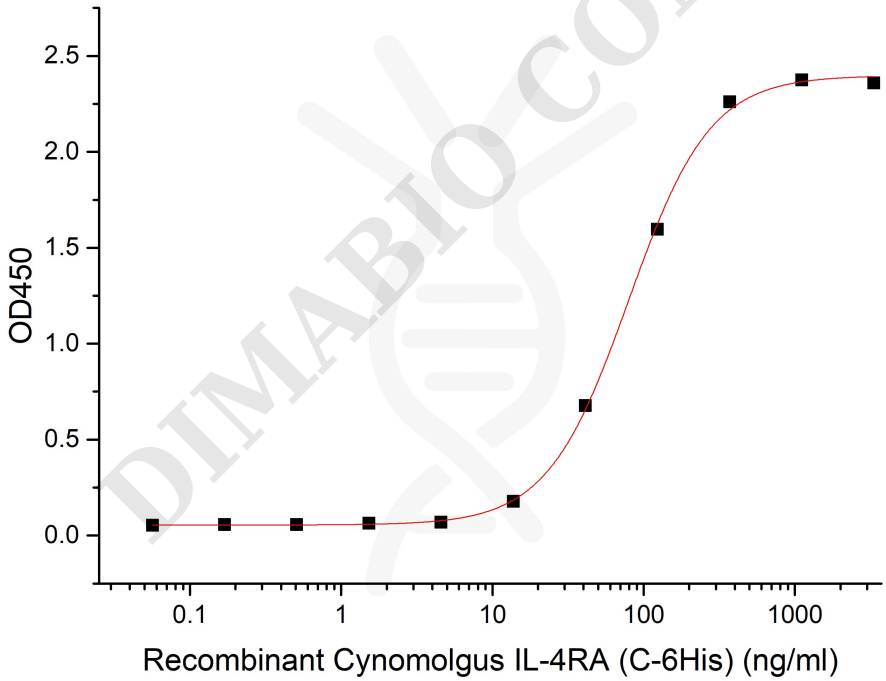

Figure 4. Immobilized Human IL-4-Fc at 5μg/ml (100 μl/well) can bind Cynomolgus IL-4Ra-His. The ED50 of Recombinant Human IL-4Ra-His is 79.49 ng/ml.