

GFH87

Recombinant Human IL-17A

Description

Interleukin-17A (IL-17A), also known as CTLA-8, is a member of the IL-17 family of proteins. IL-17A is a proinflammatory cytokine that is secreted by activated CD4+ and CD8+ T lymphocytes. IL-17A acts through its receptor, IL-17R, to promote increased cytokine and chemokine secretion. In turn, the cytokines and chemokines mediate the immunoregulatory function of IL-17A by promoting the proliferation, maturation, and chemoattraction of neutrophils to inflammatory sites. Elevated levels of IL-17A are associated with rheumatoid arthritis, airway inflammation, allograft rejection, inflammatory bowel disease, psoriasis, cancer, and multiple sclerosis. Human, mouse, and rat IL-17A show activity on mouse cells.

Length	137 / 274 aa
Molecular Weight	15.7 / 31.3 kDa
Source	E. coli
Accession Number	Q16552
Purity	≥95% determined by reducing and non-reducing SDS-PAGE

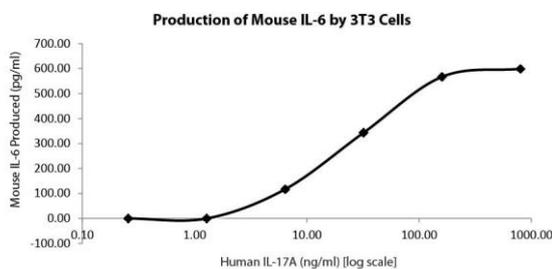
Specifications

Alternative Names	Interleukin-17A, interleukin 17A, IL17A, IL 17A
Biological Activity	Human IL-17A is fully biologically active when compared to standard. The activity is determined by the ability to produce mouse IL-6 by 3T3 cells and it is typically less than 10 ng/ml. This corresponds to an expected specific activity of 1×10^5 units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MIVKAGITIP RNP GCPNSED KNFPRTVMVN LNIHNRNTNT NPKRSSDYYN RSTSPWNLHR NEDPERYPSV IWEAKCRHLG CINADGNVDY HMNSVPIQQE IILVLRREPPH CPNSFRLEKI LVSVGCTCVT PIVHHVA

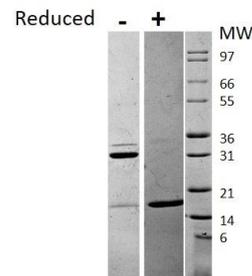
Preparation and Storage

Reconstitution	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM HCl at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Stability and Storage	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

Data



Induced production of Mouse IL-6 by 3T3 cells. Production of mouse IL-6 was measured to calculate the ED50, which is as expected less than 10 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human IL-17A has a predicted Mw of 31.3 kDa (each monomer is 15.1 kDa).