

Bioactive

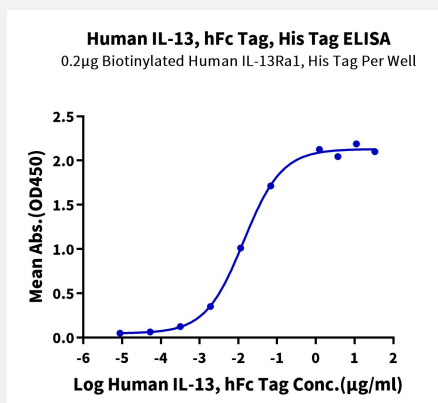
HuPro®

IL13 (Human) Recombinant Protein

Catalog # P9903

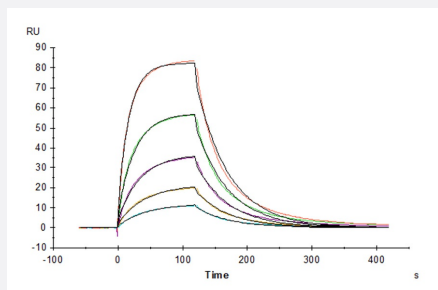
Size 100 ug

Applications



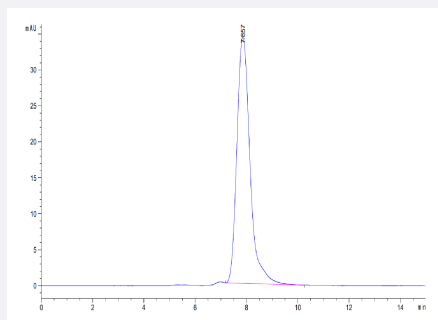
Enzyme-linked Immunoabsorbent Assay

Immobilized Biotinylated Human IL-13Ra1, His Tag at 2 ug/mL (100 uL/well) on the streptavidin precoated plate (5 ug/mL). Dose response curve for Human IL-13, hFc Tag with the EC50 of 15.8 ng/mL determined by ELISA.



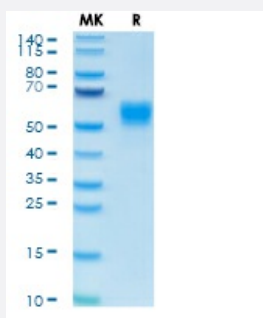
Surface Plasmon Resonance

Human IL-13, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-13Ra1, His Tag with an affinity constant of 0.399 uM as determined in SPR assay (Biacore T200).



SEC-HPLC

The purity of-Human IL-13 is greater than 95% as determined by SEC-HPLC.



Tris-Bis PAGE

Human IL-13 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Specification

Product Description	Human IL13 (AAK53823, Gly21-Asn132) partial recombinant protein with hFc tag at N-Terminus expressed in HEK293 cells.
Sequence	Gly21-Asn132
Host	Human
Theoretical MW (kDa)	39.6
Form	Lyophilized
Preparation Method	Mammalian cell (HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	The EC ₅₀ was 15.8 ng/mL, measured by ELISA at 2 ug/mL. The affinity constant of 0.399 uM as determined in SPR assay (Biacore T200).
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of-Human IL-13 is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human IL-13 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SDS-PAGE SPR The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from sterile distilled Water is > 100 ug/mL
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of bioactivity analysis

Applications

- Enzyme-linked Immunoabsorbent Assay

Immobilized Biotinylated Human IL-13Ra1, His Tag at 2 ug/mL (100 uL/well) on the streptavidin precoated plate (5 ug/mL). Dose response curve for Human IL-13, hFc Tag with the EC50 of 15.8 ng/mL determined by ELISA.

- Functional Study

- SDS-PAGE

- Surface Plasmon Resonance

Human IL-13, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-13Ra1, His Tag with an affinity constant of 0.399 uM as determined in SPR assay (Biacore T200).

Gene Info — IL13

Entrez GeneID [3596](#)

Protein Accession# [AAK53823](#)

Gene Name IL13

Gene Alias ALRH, BHR1, IL-13, MGC116786, MGC116788, MGC116789, P600

Gene Description interleukin 13

Omim ID [147683 600807 607154](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene encodes an immunoregulatory cytokine produced primarily by activated Th2 cells. This cytokine is involved in several stages of B-cell maturation and differentiation. It up-regulates CD23 and MHC class II expression, and promotes IgE isotype switching of B cells. This cytokine down-regulates macrophage activity, thereby inhibits the production of pro-inflammatory cytokines and chemokines. This cytokine is found to be critical to the pathogenesis of allergen-induced asthma but operates through mechanisms independent of IgE and eosinophils. This gene, IL3, IL5, IL4, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL4. [provided by RefSeq]

Other Designations -

Pathway

- [Asthma](#)
- [Cytokine-cytokine receptor interaction](#)
- [Fc epsilon RI signaling pathway](#)
- [Jak-STAT signaling pathway](#)

Disease

- [Acquired Immunodeficiency Syndrome](#)
- [Adenocarcinoma](#)
- [Aggressive Periodontitis](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Biliary Tract Neoplasms](#)
- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cataract](#)
- [Celiac Disease](#)
- [Central Nervous System Neoplasms](#)
- [Chlamydia Infections](#)

- [Chronic Periodontitis](#)
- [Colitis](#)
- [Conjunctivitis](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Drug Hypersensitivity](#)
- [Eczema](#)
- [Edema](#)
- [Egg Hypersensitivity](#)
- [Eosinophilia](#)
- [Epidermal Necrolysis](#)
- [Erythema Nodosum](#)
- [Esophageal Neoplasms](#)
- [Esophagitis](#)
- [Eye Diseases](#)
- [Fetal Diseases](#)
- [Fibrosis](#)
- [Food Hypersensitivity](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Gingival Hemorrhage](#)

- [Glioblastoma](#)
- [Glioma](#)
- [Glomerulonephritis](#)
- [Graves Disease](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Kidney Failure](#)
- [Latex Hypersensitivity](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malaria](#)
- [Mastocytosis](#)
- [Migraine Disorders](#)
- [Multiple Myeloma](#)

- [Multiple Sclerosis](#)
- [Musculoskeletal Diseases](#)
- [Neoplasms](#)
- [Nephrosis](#)
- [Nephrotic Syndrome](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Onchocerciasis](#)
- [Osteoarthritis](#)
- [Osteoporosis](#)
- [Pain](#)
- [Parasitemia](#)
- [Pemphigoid](#)
- [Peptic Ulcer](#)
- [Periodontal Attachment Loss](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prenatal Exposure Delayed Effects](#)
- [Prostatic Neoplasms](#)
- [Psoriasis](#)
- [Puerperal Disorders](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)

- [Radiation Pneumonitis](#)
- [Recurrence](#)
- [Respiratory Hypersensitivity](#)
- [Respiratory Sounds](#)
- [Respiratory Syncytial Virus Infections](#)
- [Rhinitis](#)
- [Sarcoidosis](#)
- [Sarcoma](#)
- [Schistosomiasis japonica](#)
- [Schistosomiasis mansoni](#)
- [Scleroderma](#)
- [Sepsis](#)
- [Skin Diseases](#)
- [Stevens-Johnson Syndrome](#)
- [Streptococcal Infections](#)
- [Stroke](#)
- [Trachoma](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Vaginitis](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)