

Bioactive

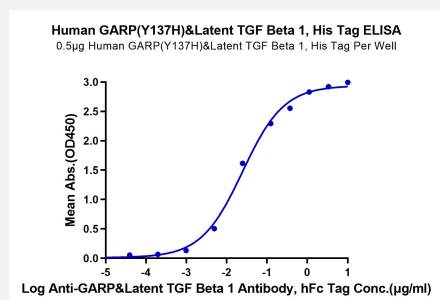
HuPro®

LRRC32/TGFB1 (Human) Recombinant Protein

Catalog # P9808

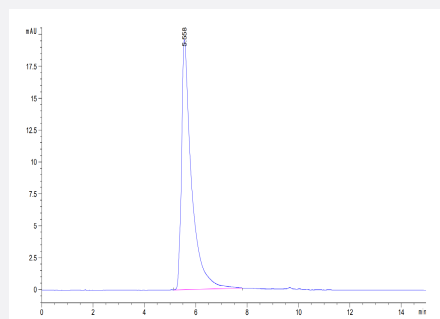
Size 100 ug

Applications



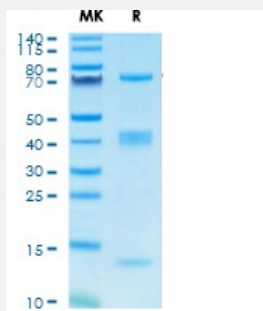
Enzyme-linked Immunoabsorbent Assay

Immobilized Human GARP (Y137H) &Latent TGF Beta 1 Complex, His Tag at 5 ug/mL (100 uL/well) on the plate. Dose response curve for Anti-GARP&Latent TGF Beta 1 Antibody, hFc Tag with the EC50 of 24.8 ng/mL determined by ELISA.



SEC-HPLC

The purity of Human GARP (Y137H) &Latent TGF Beta 1 Complex is greater than 95% as determined by SEC-HPLC.



Tris-Bis PAGE

Human GARP (Y137H) &Latent TGF Beta 1 Complex on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Specification

Product Description	Human LRRC32/TGFB1 (Q14392(GARP(Y137H))/P01137(Latent TGF beta 1), His20-Leu628(GARP(Y137H))/Leu30-Ser390(Latent TGF beta 1)) partial recombinant protein with His-Avi tag at C-terminus expressed in HEK293 cells.
Sequence	His20-Leu628(GARP(Y137H));Leu30-Ser390(Latent TGF Beta 1)
Host	Human
Theoretical MW (kDa)	70.3
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 24.8 ng/mL, measured by ELISA at 5 ug/mL.
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human GARP (Y137H) & Latent TGF Beta 1 Complex is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human GARP (Y137H) & Latent TGF Beta 1 Complex on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SDS-PAGE 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 -81°C. Aliquot to avoid repeated freezing and thawing.
Note	Result of bioactivity analysis

Applications

- Enzyme-linked Immunoabsorbent Assay

Immobilized Human GARP (Y137H) & Latent TGF Beta 1 Complex, His Tag at 5 ug/mL (100 uL/well) on the plate. Dose response curve for Anti-GARP & Latent TGF Beta 1 Antibody, hFc Tag with the EC₅₀ of 24.8 ng/mL determined by ELISA.

- Functional Study

- SDS-PAGE

Gene Info — LRRC32

Entrez GeneID	2615
Protein Accession#	Q14392(GARP(Y137H));P01137(Latent TGF beta 1)
Gene Name	LRRC32
Gene Alias	D11S833E, GARP
Gene Description	leucine rich repeat containing 32
Omim ID	137207
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a type I membrane protein which contains 20 leucine-rich repeats. Alterations in the chromosomal region 11q13-11q14 are involved in several pathologies. [provided by RefSeq]
Other Designations	garpin glycoprotein A repetitions predominant

Gene Info — TGFB1

Entrez GeneID	7040
Protein Accession#	Q14392(GARP(Y137H));P01137(Latent TGF beta 1)
Gene Name	TGFB1
Gene Alias	CED, DPD1, TGFB, TGFbeta
Gene Description	transforming growth factor, beta 1
Omim ID	131300 190180 219700
Gene Ontology	Hyperlink
Gene Summary	TGFB is a multifunctional peptide that controls proliferation, differentiation, and other functions in many cell types. TGFB acts synergistically with TGFA (MIM 190170) in inducing transformation. It also acts as a negative autocrine growth factor. Dysregulation of TGFB activation and signaling may result in apoptosis. Many cells synthesize TGFB and almost all of them have specific receptors for this peptide. TGFB1, TGFB2 (MIM 190220), and TGFB3 (MIM 190230) all function through the same receptor signaling systems.[supplied by OMIM]

Other Designations

TGF-beta 1 protein|diaphyseal dysplasia 1, progressive|transforming growth factor-beta 1

Pathway

- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Cytokine-cytokine receptor interaction](#)
- [Hypertrophic cardiomyopathy \(HCM\)](#)
- [MAPK signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Renal cell carcinoma](#)
- [TGF-beta signaling pathway](#)

Disease

- [Abortion](#)
- [Abscess](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyps](#)
- [Adrenal Gland Neoplasms](#)
- [Aggressive Periodontitis](#)
- [Albuminuria](#)
- [Alcoholism](#)

- [alpha 1-Antitrypsin Deficiency](#)
- [Alpha-1-antitrypsin deficiency](#)
- [Alveolar Bone Loss](#)
- [Alveolitis](#)
- [Alzheimer disease](#)
- [Amyotrophic lateral sclerosis](#)
- [Anemia](#)
- [Angina Pectoris](#)
- [Angioedema](#)
- [Anodontia](#)
- [Anoxia](#)
- [Aortic Aneurysm](#)
- [Aortic Valve Stenosis](#)
- [Arthritis](#)
- [Asbestosis](#)
- [Asthma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Atrial Fibrillation](#)
- [Atrophy](#)
- [Autistic Disorder](#)
- [Autoimmune Diseases](#)
- [Behcet Syndrome](#)
- [Berylliosis](#)
- [Biliary Tract Neoplasms](#)
- [Bone Diseases](#)

- [Bone Marrow Diseases](#)
- [Brain Ischemia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Bronchiolitis Obliterans](#)
- [Bronchopulmonary Dysplasia](#)
- [Brucellosis](#)
- [Cadaver](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Carotid Stenosis](#)
- [Celiac Disease](#)
- [Cellulitis](#)
- [Cerebral Amyloid Angiopathy](#)
- [Cerebrovascular Accident](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Chagas Disease](#)
- [Chlamydia Infections](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Chronic Periodontitis](#)
- [Cicatrix](#)
- [Cleft Lip](#)

- [Cleft Palate](#)
- [Clonorchiasis](#)
- [Colitis](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Common Variable Immunodeficiency](#)
- [Connective Tissue Diseases](#)
- [Constriction](#)
- [Corneal Dystrophies](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Critical Illness](#)
- [Crohn Disease](#)
- [Cystic fibrosis](#)
- [Death](#)
- [Delayed Graft Function](#)
- [Dementia](#)
- [Dengue Hemorrhagic Fever](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Diabetic Retinopathy](#)
- [Disease Progression](#)

- [Disease Susceptibility](#)
- [Drug Hypersensitivity](#)
- [Drug Toxicity](#)
- [Ductus Arteriosus](#)
- [Duodenal Ulcer](#)
- [Eclampsia](#)
- [Eczema](#)
- [Edema](#)
- [Embryo Loss](#)
- [Emphysema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Epstein-Barr Virus Infections](#)
- [Esophageal Neoplasms](#)
- [Exanthema](#)
- [Exfoliation Syndrome](#)
- [Fatigue Syndrome](#)
- [Fatty Liver](#)
- [Fetal Diseases](#)
- [Fetal Membranes](#)
- [Fibrosis](#)
- [Food Hypersensitivity](#)
- [Fractures](#)
- [Gallbladder Neoplasms](#)
- [Gastritis](#)
- [Gastrointestinal Hemorrhage](#)

- [Genetic Predisposition to Disease](#)
- [Gestational Trophoblastic Neoplasms](#)
- [Giardiasis](#)
- [Gingival Overgrowth](#)
- [Glaucoma](#)
- [Glomerulonephritis](#)
- [Glomerulosclerosis](#)
- [Glucosephosphate Dehydrogenase Deficiency](#)
- [Gout](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Graves Ophthalmopathy](#)
- [Hashimoto Disease](#)
- [Head and Neck Neoplasms](#)
- [Heart Block](#)
- [Heart Diseases](#)
- [Heart Failure](#)
- [Heart Valve Diseases](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hemochromatosis](#)
- [Hepatitis](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hepatitis D](#)

- [Hereditary hemochromatosis](#)
- [HIV Infections](#)
- [Hypercapnia](#)
- [Hypercholesterolemia](#)
- [Hyperglycemia](#)
- [Hyperlipidemias](#)
- [Hyperparathyroidism](#)
- [Hyperplasia](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Hypertrophy](#)
- [Hyperuricemia](#)
- [Idiopathic Pulmonary Fibrosis](#)
- [Immune System Diseases](#)
- [Infant](#)
- [Infection](#)
- [Infertility](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Intervertebral Disk Displacement](#)
- [Intracranial Aneurysm](#)
- [Irritable Bowel Syndrome](#)
- [Keloid](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)

- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leprosy](#)
- [Leptospirosis](#)
- [Leukemia](#)
- [Lichen Planus](#)
- [Liver Cirrhosis](#)
- [Liver Diseases](#)
- [Liver Failure](#)
- [Liver Neoplasms](#)
- [Low Back Pain](#)
- [Lung carcinoma](#)
- [Lung Diseases](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malaria](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mental Disorders](#)
- [Mesothelioma](#)

- [Metabolic Diseases](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Migraine Disorders](#)
- [Mitral Valve Insufficiency](#)
- [Mitral Valve Prolapse](#)
- [Mitral Valve Stenosis](#)
- [Mouth Neoplasms](#)
- [Multiple Sclerosis](#)
- [Multiple System Atrophy](#)
- [Musculoskeletal Diseases](#)
- [Myelodysplastic Syndromes](#)
- [Myocardial Infarction](#)
- [Myocardial Ischemia](#)
- [Myopia](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Nephritis](#)
- [Nephrotic Syndrome](#)
- [Neurodegenerative Diseases](#)
- [Neuropsychological Tests](#)
- [Neutropenia](#)
- [Obesity](#)
- [Obstetric Labor](#)

- [Oral Submucous Fibrosis](#)
- [Oropharyngeal Neoplasms](#)
- [Ossification of Posterior Longitudinal Ligament](#)
- [Osteoarthritis](#)
- [Osteolysis](#)
- [Osteoporosis](#)
- [Otitis Media](#)
- [Otosclerosis](#)
- [Ovarian cancer](#)
- [Ovarian Diseases](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pain](#)
- [Pancreatitis](#)
- [Papillomavirus Infections](#)
- [Paraproteinemias](#)
- [Parvoviridae Infections](#)
- [Pelvic Pain](#)
- [Pemphigus](#)
- [Penile Induration](#)
- [Peptic Ulcer](#)
- [Periodontal Attachment Loss](#)
- [Periodontal Diseases](#)
- [Periodontal Pocket](#)
- [Periodontitis](#)
- [Pharyngeal Neoplasms](#)

- [Pneumoconiosis](#)
- [Polyarteritis Nodosa](#)
- [Polycystic Kidney](#)
- [Polycystic kidney disease](#)
- [Polycystic Ovary Syndrome](#)
- [Postoperative Complications](#)
- [Precancerous Conditions](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prenatal Exposure Delayed Effects](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Prostatitis](#)
- [Prosthesis Failure](#)
- [Pseudomonas Infections](#)
- [Psoriasis](#)
- [Pterygium](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Pulmonary Emphysema](#)
- [Pulmonary Fibrosis](#)
- [Purpura](#)
- [Q Fever](#)
- [Radiation Injuries](#)

- [Radiation Pneumonitis](#)
- [Radius Fractures](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Reflex Sympathetic Dystrophy](#)
- [Renal Insufficiency](#)
- [Reperfusion Injury](#)
- [Respiratory Hypersensitivity](#)
- [Respiratory Sounds](#)
- [Respiratory Syncytial Virus Infections](#)
- [Respiratory Tract Infections](#)
- [Retinal Detachment](#)
- [Retinopathy of Prematurity](#)
- [Rheumatic Heart Disease](#)
- [Rhinitis](#)
- [Sarcoidosis](#)
- [Scleroderma](#)
- [Seminoma](#)
- [Sepsis](#)
- [Shock](#)
- [Silicosis](#)
- [Sinusitis](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Skin Ulcer](#)
- [Spinal Fractures](#)

- [Spinal Osteophytosis](#)
- [Spondylitis](#)
- [Stomach Neoplasms](#)
- [Stomach Ulcer](#)
- [Stroke](#)
- [Substance Withdrawal Syndrome](#)
- [Sudden Infant Death](#)
- [Syndrome](#)
- [Systemic Vasculitis](#)
- [Testicular Neoplasms](#)
- [Thoracic Neoplasms](#)
- [Thrombophilia](#)
- [Thrombosis](#)
- [Thyroiditis](#)
- [Tobacco Use Disorder](#)
- [Trachoma](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Tract Infections](#)
- [Urination Disorders](#)
- [Urogenital Abnormalities](#)
- [Urticaria](#)
- [Uterine Cervical Incompetence](#)
- [Uterine Cervical Neoplasms](#)
- [Ventricular Dysfunction](#)
- [Vesico-Ureteral Reflux](#)

- [Viremia](#)
- [Vitreoretinopathy](#)
- [Wegener Granulomatosis](#)
- [Werner syndrome](#)
- [Wounds and Injuries](#)