ARG83356
arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta 1, PDGF BB, IL6, TNF alpha)

Package: 96 wells
Store at: 4°C, -20°C

Summary

Product Description	ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta 1, PDGF BB, IL6, TNF alpha) is an Enzyme Immunoassay kit for the quantification of TGF beta 1, PDGF BB, IL6, TNF alpha in serum, plasma and cell culture supernatant. See all Multiplex ELISA kits
Tested Reactivity	Rat
Tested Application	ELISA
Target Name	Fibrotic
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	TGF beta1: 31.25 pg/ml PDGF BB: 31.25 pg/ml IL6: 62.5 pg/ml TNF alpha: 31.25 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	TGF beta1: 62.5 - 2000 pg/ml PDGF BB: 62.5 - 2000 pg/ml IL6: 125 - 4000 pg/ml TNF alpha: 62.5 - 2000 pg/ml
Sample Volume	50 µl

Application Instructions

Assay Time	4.5 hours

Properties

Form	96 well
Storage instruction	Store components at 4°C or -20°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

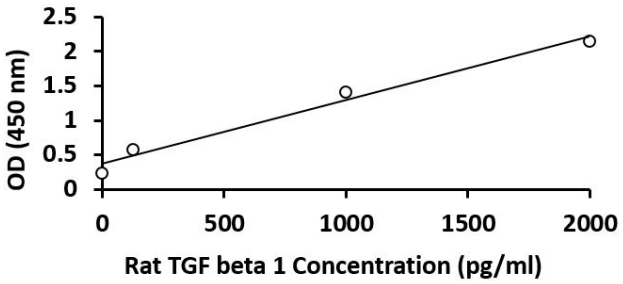
Gene Symbol	TGFB1; PDGFB; IL6; TNF
Gene Full Name	Transforming Growth Factor Beta 1; Platelet Derived Growth Factor Subunit B; Interleukin 6; Tumor Necrosis Factor

Background	TGF beta 1:This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate a latency-associated peptide (LAP) and a mature peptide, and is found in either a latent form composed of a mature peptide homodimer, a LAP homodimer, and a latent TGF-beta binding protein, or in an active form consisting solely of the mature peptide homodimer. The mature peptide may also form heterodimers with other TGFB family members. This encoded protein regulates cell proliferation, differentiation and growth, and can modulate expression and activation of other growth factors including interferon gamma and tumor necrosis factor alpha. This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease. [provided by RefSeq, Aug 2016] PDGF BB:This gene encodes a member of the protein family comprised of both platelet-derived growth factors (PDGF) and vascular endothelial growth factors (VEGF). The encoded preproprotein is proteolytically processed to generate platelet-derived growth factor subunit B, which can homodimerize, or alternatively, heterodimerize with the related platelet-derived growth factor subunit A. These proteins bind and activate PDGF receptor tyrosine kinases, which play a role in a wide range of developmental processes. Mutations in this gene are associated with meningioma. Reciprocal translocations between chromosomes 22 and 17, at sites where this gene and that for collagen type 1, alpha 1 are located, are associated with dermatofibrosarcoma protuberans, a rare skin tumor. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2015] IL6:This gene encodes a cytokine that functions in inflammation and the maturation of B cells. In addition, the encoded protein has been shown to be an endogenous pyrogen capable of inducing fever in people with autoimmune diseases or infections. The protein is primarily produced at sites of acute and chronic inflammation, where it is secreted into the serum and induces a transcriptional inflammatory response through interleukin 6 receptor, alpha. The functioning of this gene is implicated in a wide variety of inflammation-associated disease states, including suspectibility to diabetes mellitus and systemic juvenile rheumatoid arthritis. Elevated levels of the encoded protein have been found in virus infections, including COVID-19 (disease caused by SARS-CoV-2). [provided by RefSeq, Aug 2020] TNF alpha:This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFBR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, psoriasis, rheumatoid arthritis ankylosing spondylitis, tuberculosis, autosomal dominant polycystic kidney disease, and cancer. Mutations in this gene affect susceptibility to cerebral malaria, septic shock, and Alzheimer disease. Knockout studies in mice also suggested the neuroprotective function of this cytokine. [provided by RefSeq, Aug 2020]
Function	TGF beta 1:Transforming growth factor beta-1 proprotein: Precursor of the Latency-associated peptide (LAP) and Transforming growth factor beta-1 (TGF-beta-1) chains, which constitute the regulatory and active subunit of TGF-beta-1, respectively. [UniProt] PDGF BB:Growth factor that plays an essential role in the regulation of embryonic development, cell proliferation, cell migration, survival and chemotaxis. Potent mitogen for cells of mesenchymal origin. [UniProt] IL6:Through activation of IL6ST-YAP-NOTCH pathway, induces inflammation-induced epithelial regeneration (By similarity). [UniProt] TNF alpha:Plays a role in angiogenesis by inducing VEGF production synergistically with IL1B and IL6. Promotes osteoclastogenesis and therefore mediates bone resorption (By similarity). [UniProt]
Highlight	Related Product: TGF beta 1 antibodies; PDGF BB antibodies; IL6 antibodies; TNF alpha antibodies; Related news: Fibrotic Marker Multiplex ELISA Kits are launch;

Images

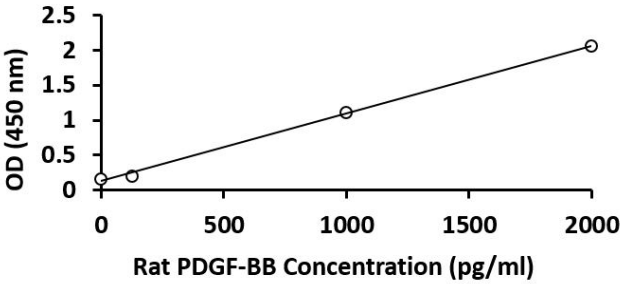
	1	2	3	4	5	6	7	8	9	10	11	12
A	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1
B	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB
C	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6
D	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α
E	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1	TGF-β1
F	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB	PDGF-BB
G	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6	IL-6
H	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α	TNF-α

Antibodies Coating Pattern In Microtiter Plate of ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha)



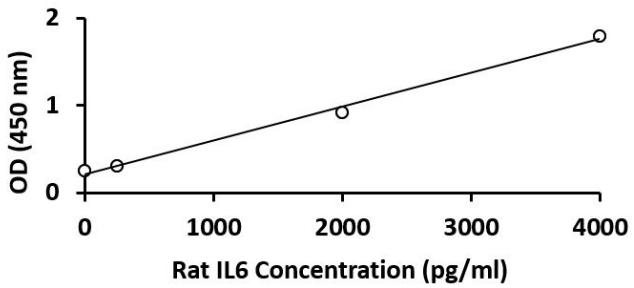
ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) standard curve image

ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) results of a typical standard for Rat TGF beta 1 run with optical density reading at 450 nm.



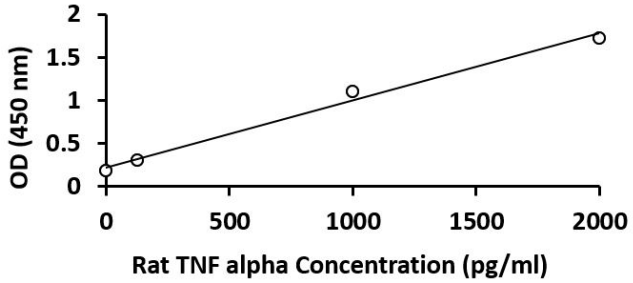
ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) standard curve image

ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) results of a typical standard for Rat PDGF BB run with optical density reading at 450 nm.



ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) standard curve image

ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) results of a typical standard for Rat IL6 run with optical density reading at 450 nm.



ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) standard curve image

ARG83356 arigoPLEX® Rat Fibrotic Marker Multiplex ELISA Kit (TGF beta1, PDGF BB, IL6, TNF alpha) results of a typical standard for Rat TNF alpha run with optical density reading at 450 nm.