Human Transforming Growth Factor beta 1(TGF-b1)

Specimen Type	Platelet-free EDTA plasma
Specimen Volume	1 mL
Collection	Collect in lavender top tube using EDTA as an anticoagulant. Centrifuge for 15 minutes at 1000 x g within 30 minutes of collection. Centrifuge plasma again at 3000 x g for 10 minutes for complete platelet removal. Freeze at -20°C or below. **For fixed speed centrifuges such as 645e:** Collect in lavender top tube using EDTA as an anticoagulant. Centrifuge 3 times for 10 minutes at 1600 x g while decanting the plasma each time before the next spin within 30 minutes of collection. Freeze at -20°C or below.
Minimum Volume	0.25 mL
Handling	Ship frozen on dry ice.
Rejection Criteria	Hemolyzed specimens Hyperlipemic specimens Specimens with particulate matter or microbial contamination Specimens outside of listed stability Samples submitted without two unique identifiers and date of collection.
Stability	Refrigerated at 4 °C for 2 days Frozen at -20°C for 14 days. Frozen at -70°C for 30 days.
Methodology	ELISA
Reference Range	344 – 2382 pg/mL
Turnaround Time	Up to 4 business days.
CPT Code	83520
Clinical	Transforming growth factor (TGF) play a crucial roles in tissue regeneration, cell differentiation, embryonic development, and regulation of the immune system. Transforming growth factor beta is found in hematopoietic

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Significance	(blood-forming) tissue and initiates a signaling pathway that suppresses the early development of cancer cells. It enhances the deposition of extracellular matrix and may play potential role in wound healing and cirrhosis formation. Many cells synthesize TGF-*b* and almost all of them have specific receptors for this peptide.
Principle	This quantitative assay employs sandwich ELISA method. Microwells are pre-coated with antibodies against TGF-*b*1. The diluted patient samples (after activation) are added into the wells and any TGF-*b*1 present remains bound to the plate. After washing the wells, peroxidase labeled anti-TGF-*b*1 antibodies are added. Bound conjugate is visualized with TMB substrate and intensity of color is proportional to the concentration of TGF-*b*1 in the sample. Stop solution is added to each well to stop the reaction.