

Product Information	
Catalog No.	EL10083
Product name	Tovetumab ELISA Kit
Applications	ELISA
Accession	P16234
Detection method	Colorimetric
Sample type	Plasma, Serum
Assay type	Quantitative
Sensitivity	0.156 ug/ml
Range	0.31-5 ug/mL
Recovery	80-120%
Stability and Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 10% prior to the expiration date under appropriate storage condition.
Alternative Names	MEDI-575, 1243266-04-7
Shipping	2-8 deg C
Note	For Research Use Only.

Background

Tovetumab (MEDI-575) is a fully human IgG2κ monoclonal antibody that specifically binds to human platelet-derived growth factor receptor alpha (PDGFRα) and blocks receptor signal transduction by PDGF ligands. The affinity of tovetumab determined using surface plasmon resonance technology and flow cytometry demonstrated comparable binding affinity for human and monkey PDGFRα. In single and repeat-dose monkey pharmacokinetic-pharmacodynamic (PK-PD) studies, tovetumab administration resulted in dose-dependent elevation of circulating levels of PDGF-AA, a member of the PDGF ligand family, due to displacement of PDGF-AA from PDGFRα by tovetumab and subsequent blockade of PDGFRα-mediated PDGF-AA degradation. As such, PDGF-AA accumulation is an indirect measurement of receptor occupancy and is a novel PD biomarker for tovetumab. The nonlinear PK of tovetumab and dose-dependent increase in circulating PDGF-AA profiles were well described by a novel mechanistic model, in which tovetumab and PDGF-AA compete for the binding to PDGFRα.