

Product Information	
Catalog No.	EL10010
Product name	Losatuxizumab ELISA Kit
Applications	ELISA
Accession	P00533
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	ABT-806, PR-1316749, 1801544-27-3
Shipping	2-8 deg C
Note	For Research Use Only.

Background

Losatuxizumab is a biosimilar that targets EGFR. EGFR (Epidermal growth factor receptor, HER1, ErbB1) is encoded by the EGFR gene located on chromosome 7 in humans. EGFR belongs to the HER/ERBB family of proteins that includes three other receptor tyrosine kinases, ERBB2, ERBB3, ERBB4. EGFR is a transmembrane receptor and binding of its cognate ligands such as EGF (Epidermal Growth Factor) and TGF alpha (Transforming Growth Factor alpha) to the extracellular domain leads to EGFR dimerization followed by autophosphorylation of the tyrosine residues in the cytoplasmic domain. Phosphorylation of EGFR at certain residues is also mediated by Src-non-receptor kinase. EGFR activation signals multiple downstream signaling cascades such as the Ras - ERK, pi3-K - Akt, Jak - STAT and PKC pathways that help in growth and proliferation of cells. Phosphorylation of EGFR at Y1086 specifically allows binding of the adaptor protein GRB2, leading to activation of the MAPK pathway. Upon receptor activation and signaling, EGFR is endocytosed and targeted for degradation or recycling. Mutations in the EGFR gene are associated with lung cancer and multiple alternatively spliced transcript variants encode different protein isoforms of EGFR have been found. Increased production or activation of EGFR has been associated with poor prognosis in a variety of tumors. Moreover, EGFR overexpression is observed in tumors of the head and neck, brain, bladder, stomach, breast, lung, endometrium, cervix, vulva, ovary, esophagus, stomach and in squamous cell carcinoma.