



Human tumor-associated antigen (TAA) ELISA kit-Quantitative sandwich

Cat. No.:	0126WXX-1863
Assay Type:	Quantitative sandwich ELISA
Target Species:	Human
Assay Target:	TAA
Size:	48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description

Human tumor-associated antigen (TAA) ELISA kit-Quantitative sandwich is an ELISA - based *in vitro* research tool designed specifically for the quantitative detection of TAA in human samples with a range of 0.156-10 ng/mL and a minimum detectable dose (sensitivity) of <0.05 ng/mL. The kit is highly sensitive and easy to use.

Assay Principle

This kit utilizes the double-antibody Sandwich ELISA technique. The microplate is pre-coated with an anti-human TAA monoclonal antibody, while the detection agent is a biotinylated polyclonal antibody. Samples and biotinylated antibodies are added to the ELISA plate wells and subsequently washed with PBS or TBS to remove unbound material. Following this, avidin-peroxidase conjugates are introduced into the wells. After the enzyme conjugate has been thoroughly washed out with PBS or TBS, TMB substrate is added for coloration. The TMB reacts under peroxidase activity to form a blue product, which finally shifts to yellow upon the addition of the stop solution (color reagent C). The resulting color intensity is positively correlated with the quantity of the target analyte present in the sample.



Background	TAA's are a class of endogenous proteins that are highly or abnormally expressed in tumor cells but are present at extremely low levels or absent in normal cells. They form the basis for the immune system's recognition of cancer cells and serve as primary targets for tumor immunotherapy and diagnostic biomarkers. Concurrently, TAA's are key molecules in investigating how obesity influences antitumor immune responses.
Synonyms	Tumor antigen; TA
Formula Weight	28,461 Da
Applications	Human tumor-associated antigen (TAA) ELISA kit-Quantitative sandwich is used to quantify TAA in serum, plasma, and cell culture supernatant of humans, providing data to support research in a wide range of areas, including immunology, among others.
Research Area	Immunology

Specification

Sample Type	Human serum; Plasma; Cell culture supernatant
Detection Range	0.156-10 ng/mL
Sensitivity	<0.05 ng/mL
Precision (Intra-assay)	CV≤8%
Precision (Inter-assay)	CV≤12%
Cross-reactivity	No significant cross-reactivity or interference was observed.
Recovery	70-110%
Storage	Store at 2-8°C.