abcam

Product datasheet

Human beta 2 Microglobulin ELISA Kit (B2M) ab99977

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Overview

Product name Human beta 2 Microglobulin ELISA Kit (B2M)

Detection method Colorimetric

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity < 6 pg/ml

Range 15.6 pg/ml - 1000 pg/ml

Recovery < 100 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	104.6	93% - 118%
Serum	94.28	80% - 103%
Plasma	95.78	81% - 105%

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

Product overview Abcam's beta 2 Microglobulin (B2M) Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is

an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human beta

2 Microglobulin in serum, plasma and cell culture supernatants.

This assay employs an antibody specific for Human beta 2 Microglobulin coated on a 96-well plate. Standards and samples are pipetted into the wells and beta 2 Microglobulin present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human beta 2 Microglobulin antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of beta 2 Microglobulin bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Get higher sensitivity in only 90 minutes with Human Beta-2-Microglobulin ELISA Kit (ab181423)

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from our SimpleStep ELISA® range.

Notes Optimisation may be required with urine samples.

Platform Microplate

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
300X HRP-Streptavidin Concentrate	1 x 200µl
5X Assay Diluent B	1 x 15ml
Assay Diluent A	2 x 30ml
beta 2 Microglobulin Microplate (12 x 8 wells)	1 unit
Biotinylated anti-Human beta 2 Microglobulin	2 vials
Recombinant Human beta 2 Microglobulin Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

Function Component of the class I major histocompatibility complex (MHC). Involved in the presentation of peptide antigens to the immune system.

Defects in B2M are the cause of hypercatabolic hypoproteinemia (HYCATHYP) [MIM:241600]. Involvement in disease

Affected individuals show marked reduction in serum concentrations of immunoglobulin and

albumin, probably due to rapid degradation.

Note=Beta-2-microglobulin may adopt the fibrillar configuration of amyloid in certain pathologic states. The capacity to assemble into amyloid fibrils is concentration dependent. Persistently high beta(2)-microglobulin serum levels lead to amyloidosis in patients on long-term hemodialysis.

Sequence similarities Belongs to the beta-2-microglobulin family.

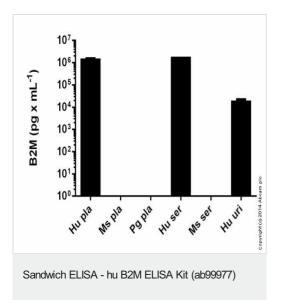
Contains 1 lg-like C1-type (immunoglobulin-like) domain.

Post-translational modifications

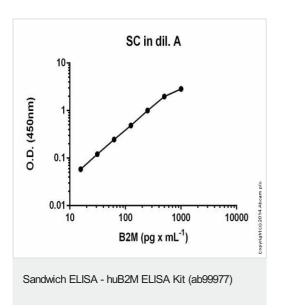
Glycation of Ile-21 is observed in long-term hemodialysis patients.

Cellular localization Secreted. Detected in serum and urine.

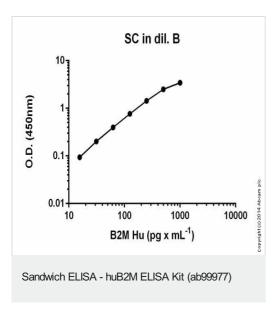
Images



huB2M measured in biofluids showing quantity (pg) per mL of tested sample



Representative Standard Curve using ab99977.



Representative Standard Curve using ab99977.

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