β2-Microglobulin (human), (native)

High purity, native protein used as a target diagnostic marker for cancer or renal failure.

Purified native human β2-Microglobulin protein.

Major Histocompatibility Complexes (MHC) are expressed on the cell surface of nucleated cells. MHC-1 is composed of two chains – membrane-bound alpha chain and non-covalently linked Beta-2 Microglobulin (B2M). The complex binds peptides produced from cellular proteolytic activity and presents them on the cell surface for evaluation by Cytotoxic T cells. B2M is necessary for MHC-1 presentation and stability of the peptide binding groove formed by the alpha-2 and alpha-3 domains.

B2M is a diagnostic marker for some cancers and for kidney disease. It can be readily leaked into serum due to the lack of a covalent membrane anchor. Serum B2M is elevated in some inflammatory and lymphoproliferative disorders due to increased rate of synthesis or cell turnover. B2M is readily taken up by the glomerular membrane and is reabsorbed by the proximal tube. The relative levels and ratios of B2M in blood and urine can distinguish cellular activation vs renal disorders, and whether a renal problem is in the glomeruli or renal tubes.

Citations: 3

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Ordering Information

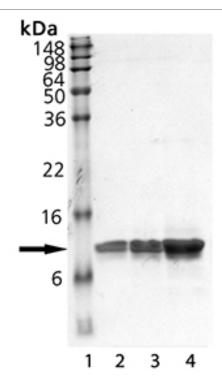
Order Online »

ALX-522-461-0100

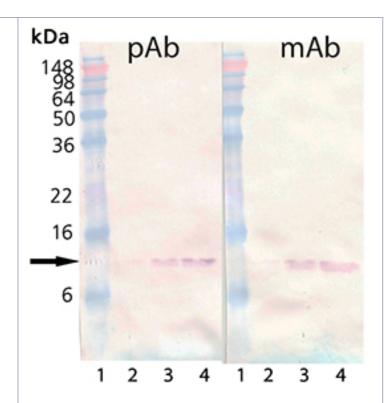
100µg

Manuals, SDS & CofA

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SDS-PAGE Analysis of β -2 Microglobulin. Lane 1: MW Marker, Lane 2: 1 μ g, Lane 3: 2 μ g, Lane 4: 5 μ g.



Western Blot analysis of β -2 Microglobulin. Lane 1: MW marker, Lane 2: 100 ng, Lane 2, 200 ng, Lane 4, 500 ng. Probed with polyclonal (left) and monoclonal (right) antibodies specific for β -2 Microglobulin.

Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended.

Short Term Storage +4°C

Long Term Storage +4°C

Shipping Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Formulation Liquid. In PBS, pH 7.2, containing 150mM sodium chloride, 1mM EDTA sodium salt and

0.05% sodium azide.

MW ~12kDa

Purity ≥95% (SDS-PAGE)

Source Purified from urine of patients with chronic renal tubular proteinuria.

UniProt ID P61769



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