

BM604HRP**Monoclonal Antibody to Beta-2-microglobulin - HRP****Alternate names:**

B2M, Beta 2 microglobulin, Beta-2 microglobulin

Quantity:

0.1 mg

Concentration:

1.0 mg/ml

Background:

b2M non-covalently associates with the 44 kDa alpha chain to form the HLA Class I antigen complex. Human beta2-microglobulin associated with HLA Class I antigens is expressed on many types of cells including lymphocytes, thymocytes, monocytes, granulocytes, platelets, endothelial cells, and epithelial cells. It is absent on erythrocytes.

Uniprot ID:[P61769](#)**NCBI:**[NP_004039.1](#)**GeneID:**[567](#)**Host / Isotype:**

Mouse / IgG2a

Clone:

B2M-01

Immunogen:

Purified Human beta-2-Microglobulin

Format:**State:** Liquid purified Ig fraction**Buffer System:** PBS**Preservatives:** 0.01% (w/v) Thimerosal**Label:** HRP – Conjugated with Horseradish Peroxidase of high specific activity and RZ=3.

The reagent is free of unconjugated as determined by size-exclusion chromatography.

Applications:

The antibody is designed for quantitative determination of soluble beta 2-Microglobulin/MHC Class I complexes. This antibody can also be used for detection of free beta 2-Microglobulin by Western blotting.

ELISA.**Western blot** (Both Reducing and non-Reducing conditions):**Recommended Dilution:** 2-4 µg/ml.**Positive Control:** U937 Human histiocytic lymphoma cell line, RAJI human Burkitt lymphoma cell line.**Negative Control:** EL4 mouse lymphoblastic lymphoma cell line.**Sample Preparation:** Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing/reducing Laemmli SDS-PAGE sample buffer.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

The antibody reacts with beta-2-Microglobulin (B2M) associated with cell-surface MHC Class I molecules and other membrane antigens as well as with soluble beta-2-Microglobulin.

Negative Species: Mouse, Bovine, Canine (Dog), Rabbit and Chicken.

Species Reactivity: Tested: Human.

Storage: Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!

This product is photosensitive and should be protected from light.

Should it contain a precipitate we recommend microcentrifugation before use.

Shelf life: one year from despatch.

Product Citations: **Originator or purchased from resellers:**

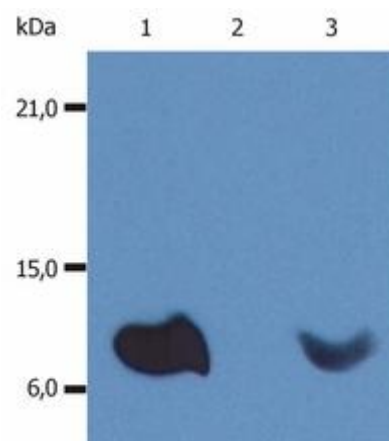
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2. Khurana M, Traum AZ, Aivado M, Wells MP, Guerrero M, Grall F, et al. Urine proteomic profiling of pediatric nephrotic syndrome. *Pediatr Nephrol*. 2006 Sep;21(9):1257-65. Epub 2006 Jun 30. PubMed PMID: 16810512.

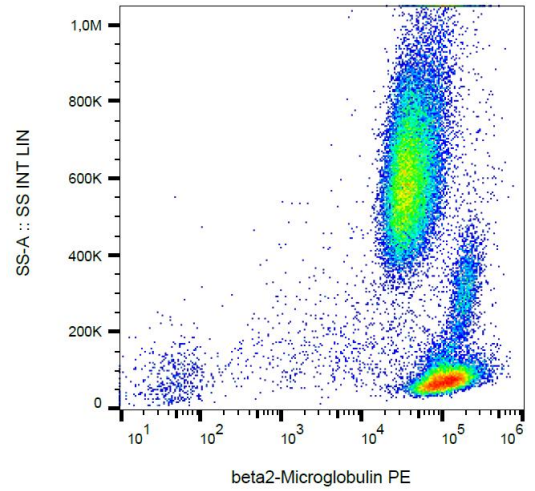
3. Poláková K, Železníková T, Russ G. HLA-G5 in the blood of leukemia patients and healthy individuals. *Leuk Res*. 2013 Feb;37(2):139-45. doi: 10.1016/j.leukres.2012.10.019. Epub 2012 Nov 10. PubMed PMID: 23146557.

4. Lafon M, Prehaud C, Megret F, Lafage M, Mouillot G, Roa M, et al. Modulation of HLA-G expression in human neural cells after neurotropic viral infections. *J Virol*. 2005 Dec;79(24):15226-37. PubMed PMID: 16306594.

Pictures: Western Blotting analysis (non-reducing conditions) of whole cell lysate of various cell lines using anti-Human β 2-microglobulin antibody (B2M-01). Lane 1: RAJI Human Burkitt lymphoma cell line. Lane 2: EL4 Mouse lymphoblastic lymphoma cell line. Lane 3: U937 Human histiocytic lymphoma cell line.



Surface staining of β 2-microglobulin in human peripheral blood with anti- β 2-microglobulin (B2M-01) PE.



Surface staining of β 2-microglobulin in human peripheral blood with anti- β 2-microglobulin (B2M-01) FITC.

