

## Product Datasheet

### Beta-2 Microglobulin Antibody (orb2639105)

<b>Catalog Number</b>	orb2639105
<b>Category</b>	Antibodies
<b>Description</b>	<p>Recognizes a protein of 12kDa, identified as beta-2 microglobulin. Major histocompatibility complex (MHC) class 1 molecules bind to antigens for presentation on the surface of cells. The proteasome is responsible for producing these antigens from the components of foreign pathogens. MHC class 1 molecules consist of an alpha heavy chain that contains three subdomains (alpha1, alpha2, alpha3) and a non-covalent associating light chain, known as beta-2-Microglobulin. Beta-2-Microglobulin associates with the alpha3 subdomain of the alpha heavy chain and forms an immunoglobulin domain-like structure that mediates proper folding and expression of MHC class 1 molecules. The alpha1 and alpha2 domains of the alpha heavy chain form the peptide antigen-binding cleft. Mutations in the beta-2-Microglobulin gene can enhance the progression of malignant melanoma phenotypes.</p>
<b>Clonality</b>	Monoclonal
<b>Species/Host</b>	Mouse
<b>Isotype</b>	Mouse IgG2b, kappa
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human
<b>Buffer/Preservatives</b>	1 mg/ml in 1X PBS; rAlbumin free, sodium azide free
<b>Purification</b>	Protein G affinity chromatography
<b>Immunogen</b>	Full length recombinant human protein was used as the immunogen for the Beta-2 Microglobulin antibody.
<b>UniProt ID</b>	<b>P61769</b>

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

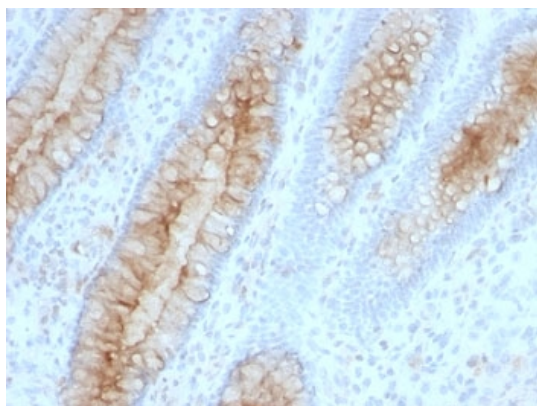
**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

<b>Tested applications</b>	FACS, IF, IHC-P, WB
<b>Dilution range</b>	Flow cytometry: 1-2ug/10 <sup>6</sup> cells, Immunofluorescence: 1-4ug/ml, Western blot: 1-2ug/ml, Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
<b>Application notes</b>	Optimal dilution of the Beta-2 Microglobulin antibody should be determined by the researcher. 1. Staining of formalin/paraffin tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min. 2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.
<b>Antibody Type</b>	Primary Antibody
<b>Clone Number</b>	B2M/961
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Note</b>	For research use only
<b>Expiration Date</b>	12 months from date of receipt.



IHC: Formalin-fixed, paraffin-embedded human colon carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

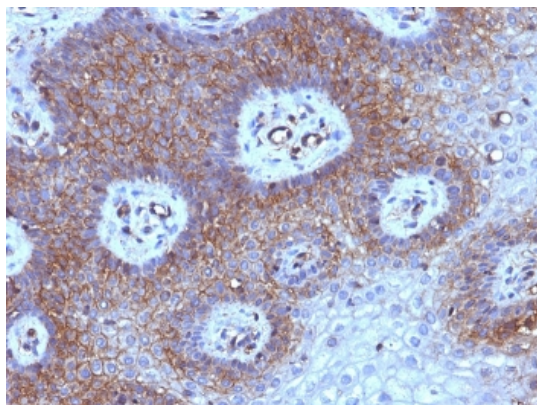
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

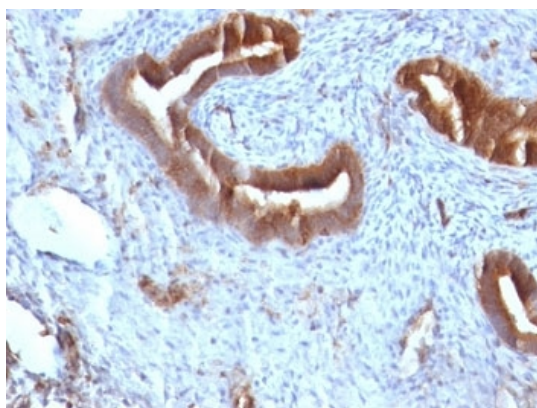
68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

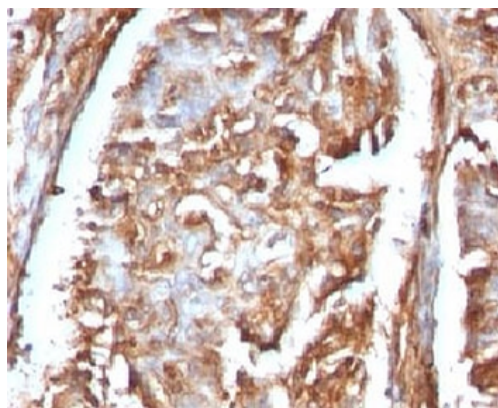
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)



IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



IHC: Formalin-fixed, paraffin-embedded human endometrial carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



IHC: Formalin-fixed, paraffin-embedded human renal carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

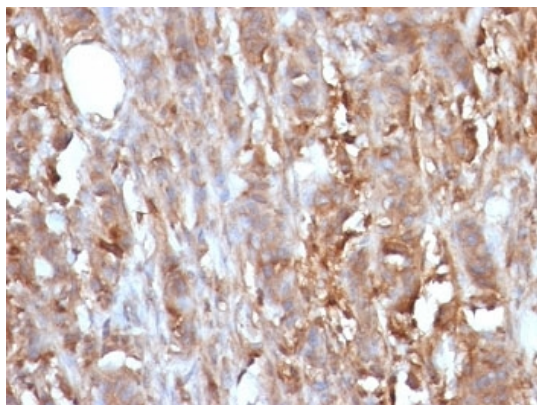
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

**Biorbyt LLC**

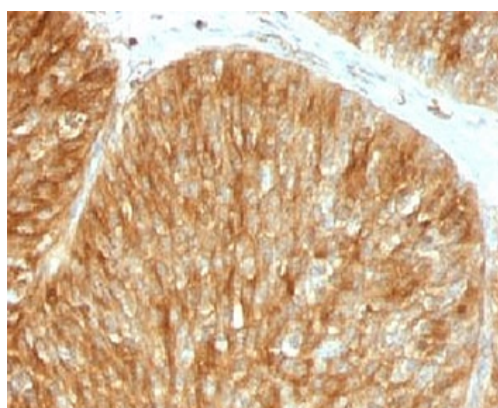
68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

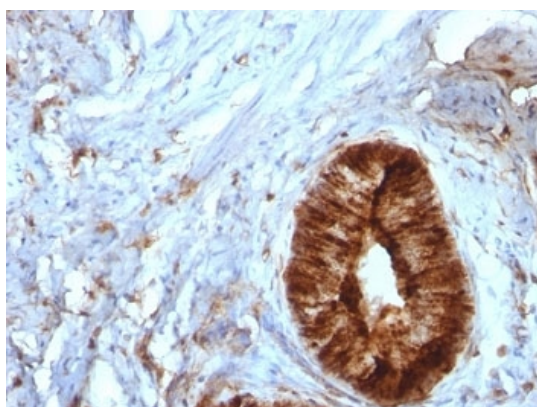
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558



IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



IHC: Formalin-fixed, paraffin-embedded human bladder carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).



IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

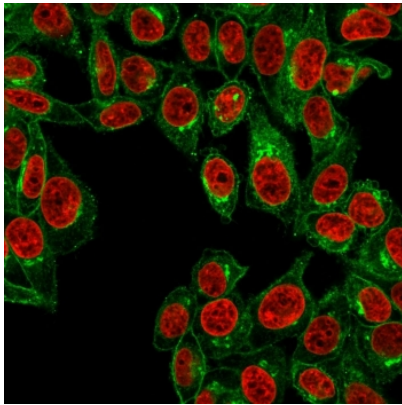
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

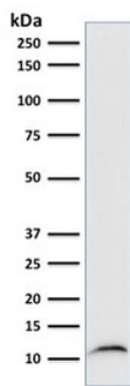
68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

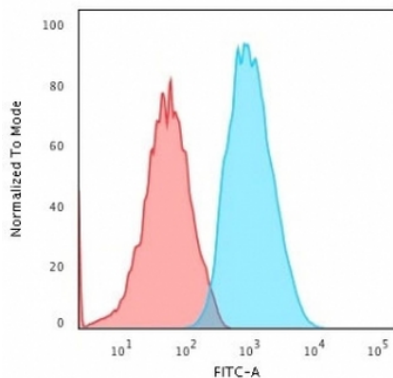
Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)



Immunofluorescent staining of human HeLa cells with Beta-2 Microglobulin antibody (green, clone B2M/961) and Reddot nuclear stain (red).



Western blot testing of human Raji cell lysate with Beta-2 Microglobulin antibody (clone B2M/961).



Flow cytometry testing of human HeLa cells with Beta-2 Microglobulin antibody (clone B2M/961); Red = isotype control, Blue = Beta-2 Microglobulin antibody.

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

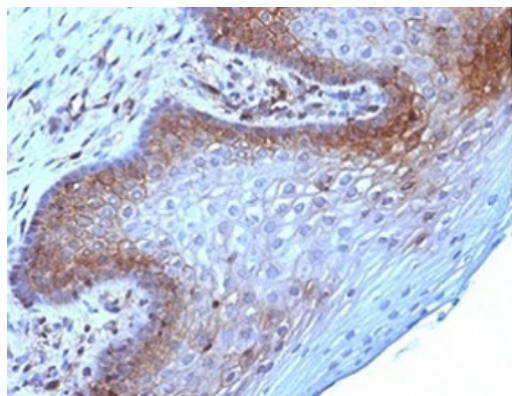
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)



IHC: Formalin-fixed, paraffin-embedded human cervical carcinoma stained with Beta-2-Microglobulin antibody (clone B2M/961).

**Biorbyt Ltd.**

7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)

Phone: [+1 \(415\) 906-5211](tel:+1(415)906-5211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)