

## Product Datasheet

### CD163 Antibody (orb2644021)

<b>Description</b>	<p>This MAb recognizes a protein of 140kDa, identified as CD163. It has been identified as an acute phase-regulated transmembrane protein whose function is to mediate the endocytosis of haptoglobin-hemoglobin complexes. This receptor is expressed on the surface of monocytes with low expression and on tissue macrophages, histiocytes with high expression. Staining with anti-CD163 has been helpful to distinguish synovial macrophages from synovial intimal fibroblasts in rheumatoid arthritis, where its specificity for macrophages was found to be superior to that of anti-CD68. Increased levels of CD163 were also detected in patients with microbial infections and myelomonocytic leukemias. Anti-CD163 is of considerable value for selective identification of monocytes and macrophages at a certain stage of differentiation and is suitable for diagnosing myelomonocytic or monocytic leukaemia and neoplasms of true histiocytic origin. CD163 is positive in skin (histiocytes), gut, Kupffer cells, a few alveolar macrophages, macrophages in the placenta, and in macrophages in inflamed tissues including tumor tissue.</p>
<b>Species/Host</b>	Mouse
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Tested Applications</b>	ELISA, IHC-P
<b>Immunogen</b>	A recombinant human partial protein corresponding to amino acids 43-196 was used as the immunogen for the CD163 antibody.
<b>Preservatives</b>	0.2 mg/ml with 0.1 mg/ml rAlbumin (US sourced), 0.05% sodium azide
<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>Application notes</b>	Optimal dilution of the antibody should be determined by the researcher.

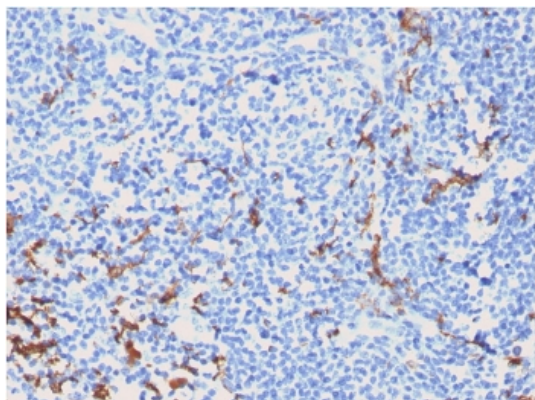
**Biorbyt Ltd.**

7 Signet Court, Swann's 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 859-353](tel:+44201223859353) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

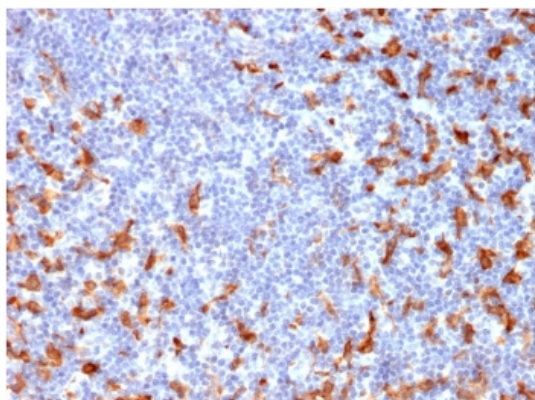
**Biorbyt LLC.**

68 TW Alexander Drive,  
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:+14159065211) | Fax: [+1 \(415\) 651-8558](tel:+14156518558)

<b>Formula</b>	0.2 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide
<b>Isotype</b>	Mouse IgG2b, kappa
<b>Clonality</b>	Monoclonal
<b>Clone Number</b>	M130/2162
<b>Purity</b>	Protein G affinity chromatography
<b>Uniprot ID</b>	<b>Q86VB7</b>
<b>Hazard Information</b>	This CD163 antibody is available for research use only.
<b>Dilution Range</b>	ELISA (order BSA-free format for coating), Immunohistochemistry (FFPE): 1-2ug/ml
<b>Expiration Date</b>	12 months from date of receipt.



IHC testing of FFPE human tonsil with CD163 antibody (clone M130/2162). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.



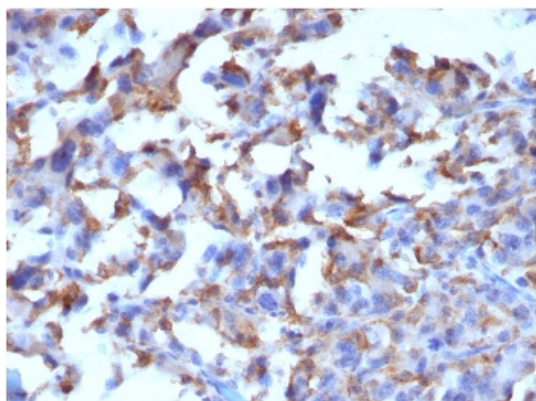
IHC testing of FFPE human lymph node with CD163 antibody (clone M130/2162). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

**Biorbyt Ltd.**

7 Signet Court, Swann's 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 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

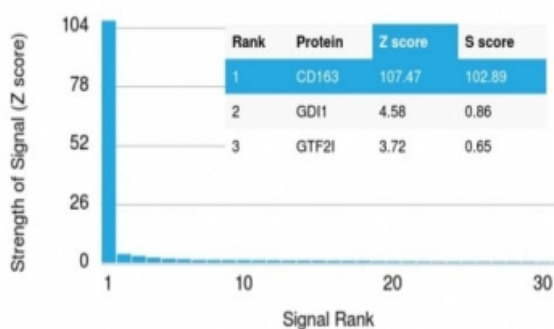
**Biorbyt LLC.**

68 TW Alexander Drive,  
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)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

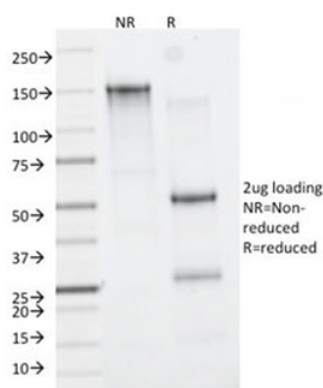


IHC testing of FFPE human histiocytoma with CD163 antibody (clone M130/2162). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min.

### Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19000 full-length human proteins using CD163 antibody (clone M130/2162). These results demonstrate the foremost specificity of the M130/2162 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free CD163 antibody (clone M130/2162) as confirmation of integrity and purity.

#### Biorbyt Ltd.

7 Signet Court, Swann's 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 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

#### Biorbyt LLC.

68 TW Alexander Drive,  
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)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)