

## Product Datasheet

### HER2 Antibody / ErbB2 / Extracellular region (orb699700)

<b>Catalog Number</b>	orb699700
<b>Category</b>	Antibodies
<b>Description</b>	Recognizes a protein of 185kDa, which is identified as c-erbB-2/HER-2/neu. Its epitope is localized in the extracellular domain. C-erbB-2/HER-2 is a member of the EGFR family. This MAb is specific and shows minimal cross-reaction with other members of the EGFR-family. Receptors of this family are located on the plasma membrane and consist of an extracellular ligand-binding domain that is connected to a large intracellular domain by a single transmembrane sequence. c-erbB-2/HER-2 protein is over-expressed in a variety of carcinomas especially those of breast and ovary.
<b>Clonality</b>	Recombinant
<b>Species/Host</b>	Rabbit
<b>Isotype</b>	Rabbit IgG, kappa
<b>Conjugation</b>	Unconjugated
<b>Reactivity</b>	Human
<b>Purification</b>	Protein A affinity chromatography
<b>Immunogen</b>	A recombinant protein encoding the extracellular domain of human c-erbB2 was used as the immunogen for the HER2 antibody.
<b>UniProt ID</b>	<b>P04626</b>
<b>Tested applications</b>	FACS, IF, IHC-P

**Biorbyt Ltd.**

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

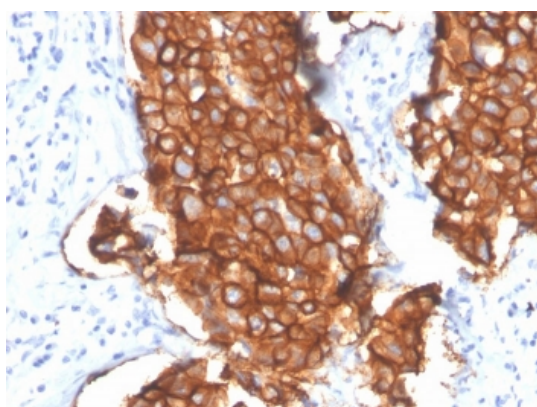
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\)1223 859353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)651-8558)

**Biorbyt LLC**

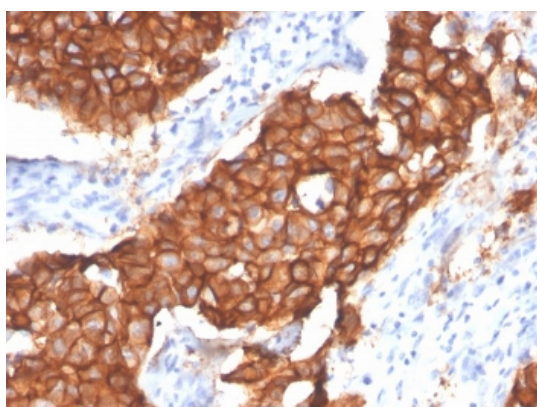
68 TW Alexander Drive  
Research Triangle Park  
Durham  
NC 27713  
United States

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>Dilution range</b>	Flow cytometry: 1-2ug/million cells,Immunofluorescence: 1-2ug/ml,Immunohistochemistry (FFPE): 1-2ug/ml for 30 minutes at RT
<b>Application notes</b>	Optimal dilution of the HER2 antibody should be determined by the researcher.
<b>Antibody Type</b>	Primary Antibody
<b>Clone Number</b>	ERBB2/4439R
<b>Formula</b>	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 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



IHC staining of FFPE human breast carcinoma with HER2 antibody (clone ERBB2/4439). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human breast carcinoma with HER2 antibody (clone ERBB2/4439). HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

#### **Biorbyt Ltd.**

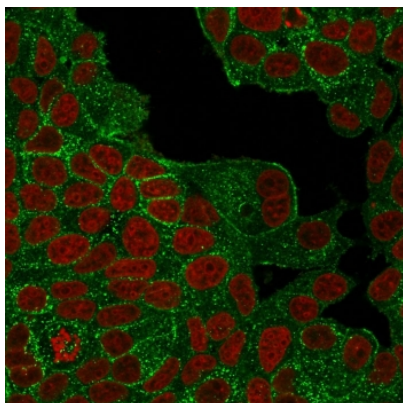
7 Signet Court, Swann Road  
Cambridge  
CB5 8LA  
United Kingdom

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)

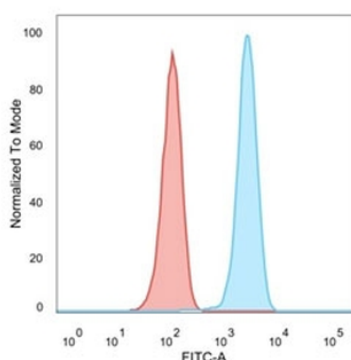
#### **Biorbyt LLC**

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)

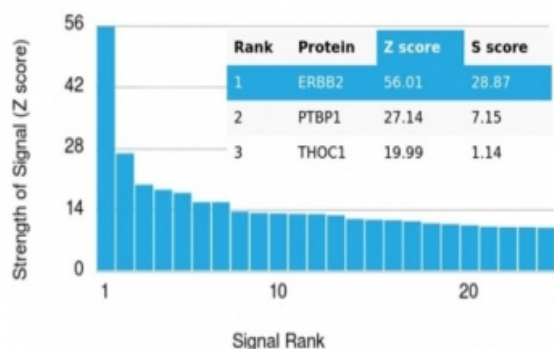


Immunofluorescent staining of PFA-fixed human MCF7 cells with HER2 antibody (clone ERBB2/4439, green) and Phalloidin (red).



Flow cytometry testing of PFA-fixed human MCF7 cells with HER2 antibody (clone ERBB2/4439); Red=isotype control, Blue=HER2 antibody.

#### Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19000 full-length human proteins using HER2 antibody. These results demonstrate the foremost specificity of the ERBB2/4439 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.

#### 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