

Human Tissue Microarray - iCon (internal control) TMA® Her-2

REF / Cat.-No.: 401 5201

iConTMA® Label			
●	●	●	●
1	2	3	4
Free Space for your tissue under investigation			
spot 1: positive		score 3+	
spot 2: positive		score 2+	
spot 3: positive		score 1+	
spot 4: negative		score 0	
		tissue type: mamma	

Technical Information:

- Spot diameter: 1.5 mm
- Fixation in 4% paraformaldehyde in PBS
- Paraffin embedded
- Slide Material: Standard: Superfrost® Plus.
- Tissue type validated by immunohistochemistry (**antibody: HER-2neu (4b5) REF 790-4493 [Ventana]**).

For Handling Instruction please see our iCon® TMA Product Sheet or contact our customer service.

Antibody / Marker description:

Her-2/neu (also known as ErbB-2) is a useful tool for the identification of overexpression of cerbB-2 oncoprotein in a variety of epithelial neoplasms, for example subsets of breast carcinomas, pulmonary adenocarcinomas, colorectal adenocarcinomas, pulmonary squamous and gastric adenocarcinomas, transitional cell carcinomas of the urinary bladder, and endometrial adenocarcinomas. It is a cell membrane surface-bound receptor tyrosine kinase and is normally involved in the signal transduction pathways leading to cell growth and differentiation. HER2 is thought to be an orphan receptor, with none of the EGF family of ligands able to activate it. However, ErbB receptors dimerise on ligand binding, and HER2 is the preferential dimerisation partner of other members of the ErbB family. The *HER2* gene is a proto-oncogene located at the long arm of human chromosome 17(17q11.2-q12). Scoring according to the guidelines of the American Society of Clinical Oncology and the College of American Pathologists (ASCO/CAP).

Literature:

- Olayioye MA (2001). "Update on HER-2 as a target for cancer therapy: intracellular signaling pathways of ErbB2/HER-2 and family members". *Breast Cancer Res* 3 (6): 385–389
- Hurtado A, Holmes KA, Geistlinger TR, Hutcheson IR, Nicholson RI, Brown M, Jiang J, Howat WJ, Ali S, Carroll JS (November 2008). "Regulation of ERBB2 by oestrogen receptor-PAX2 determines response to tamoxifen". *Nature*.
- XF Le, Franz Pruefer, Robert Bast. (2005). "HER2-targeting antibodies modulate the cyclin-dependent kinase inhibitor p27Kip1 via multiple signaling pathways". *Cell Cycle* 4 (1): 87–95.
- Ménard S, Casalini P, Campiglio M, et al. (2005). "Role of HER2/neu in tumor progression and therapy". *Cell. Mol. Life Sci.* 61 (23): 2965–78.

FOR INTERNAL QUALITY CONTROL. RESEARCH USE ONLY.

Intended for any human or animal in vitro research use only.

Version: 2.0 Stand: 09/20

 Data Sheet