

ZytoDot® 2C SPEC ERBB2/CEN 17 Probe

Previously: ZytoDot 2C SPEC HER2/CEN 17 Probe



Background

The ZytoDot® 2C SPEC ERBB2/CEN 17 Probe is designed for the simultaneous detection of ERBB2 and centromere 17 in formalin-fixed, paraffin-embedded tissue sections or cell samples.

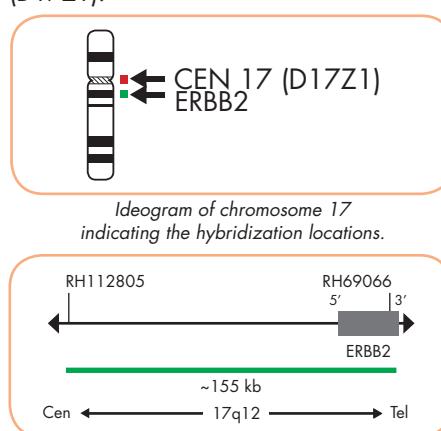
The ERBB2 gene (a.k.a. HER2 and NEU) is located in the chromosomal region 17q12 and encodes the cellular growth factor receptor p185. Amplification of the proto-oncogene ERBB2, observed in approximately 20% of all breast cancer samples, has been correlated with a poor prognosis of the disease. Similar results have been obtained for a variety of other malignant neoplasms e.g. ovarian cancer, stomach cancer, and carcinomas of the salivary gland.

References

Bhargava R, et al. (2005) Am J Clin Pathol 123: 237-43.
 Brunello E, et al. (2012) Histopathology 60: 482-8.
 Brunner K, et al. (2010) Anal Quant Cytol Histol 32: 78-89.
 Carbone A, et al. (2008) J Mol Diagn 10: 527-36.
 Coussens L, et al. (1985) Science 230: 1132-9.
 Efti T, et al. (2012) Hum Pathol 43: 921-31.
 Fasching P, et al. (2011) BMC Cancer 11: 486.
 Haas M, et al. (2011) Virchows Arch 458: 403-11.
 Hauser-Kronberger C & Dandachi N (2004) J Mol Histol 35: 647-53.
 Hopman AHN, et al. (1997) Histochem Cell Biol 108: 291-8.
 Hwang CC, et al. (2011) Histopathology 59: 984-92.
 Kounelis S, et al. (2005) Anticancer Res 25: 939-46.
 Lehmann-Che L, et al. (2011) Br J Cancer 104: 1739-46.
 Mayr D, et al. (2009) Histopathology 55: 716-23.
 Mosch B, et al. (2007) J Neuroscience 27: 6859-67.
 Moelans CB, et al. (2011) Crit Rev Oncol Hematol 80: 380-92.
 Nie X, et al. (2013) J Huazhong Univ Sci Technolog Med Sci 33: 379-84.
 Oliveira-Costa JP, et al. (2010) Hum Pathol 41: 1624-30.
 Oliveira-Costa JP, et al. (2011) Diagn Pathol 6: 73.
 Santos PB, et al. (2012) Diagn Pathol 7: 104.
 Schiavon BN, et al. (2012) Am J Surg Pathol 36: 1489-96.
 Silveira G, et al. (2012) Histol Histopathol 27: 1353-9.
 Speel EJ, et al. (1994) J Histochem Cytochem 42: 1299-307.
 Vasconcelos FA, et al. (2013) Acta Histochem 115: 240-4.
 Wachter DL, et al. (2013) Arch Gynecol Obstet 287: 337-44.
 Yıldırım S, et al. (2012) UHOD 3: 156-62.

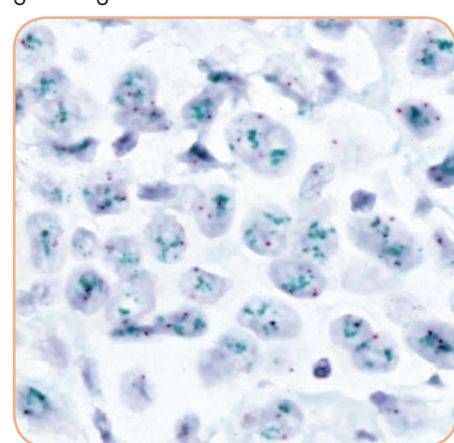
Probe Description

The ZytoDot® 2C SPEC ERBB2/CEN 17 Probe is a mixture of a Digoxigenin-labeled probe specific for the ERBB2 gene at 17q12 and a Dinitrophenyl-labeled CEN 17 probe specific for the alpha satellite centromeric region of chromosome 17 (D17Z1).

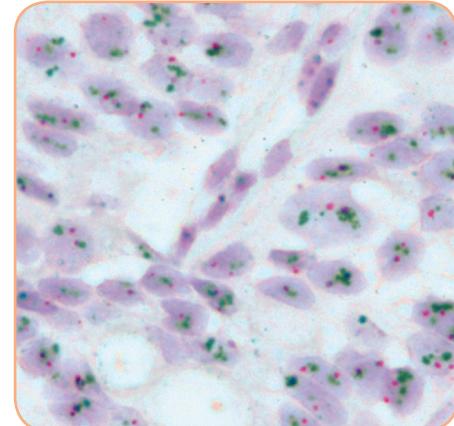


Results

Using the ZytoDot® 2C SPEC ERBB2/CEN 17 Probe Kit, two green (ERBB2) and two red (CEN 17) signals are expected in a normal interphase nucleus. In a cell with amplification of the ERBB2 gene locus, multiple copies of the green signal or green signal clusters will be observed.



Breast cancer tissue section with ERBB2 amplification as indicated by multiple green signals in each nucleus.



Gastric carcinoma tissue section with strong ERBB2 amplification as indicated by large green clusters.

Prod. No.	Product	Label	Tests* (Volume)
C-3032-100	ZytoDot 2C SPEC ERBB2/CEN 17 Probe CE IVD	Digoxigenin/DNP	10 (100 µl)
C-3032-400	ZytoDot 2C SPEC ERBB2/CEN 17 Probe CE IVD	Digoxigenin/DNP	40 (400 µl)
C-3022-10	ZytoDot 2C SPEC ERBB2/CEN 17 Probe Kit CE IVD	Digoxigenin/DNP	10
	Incl. Heat Pretreatment Solution EDTA, 150 ml; Pepsin Solution, 1ml; Probe, 0.1 ml; Wash Buffer SSC, 150 ml; 20x Wash Buffer TBS, 50 ml; Anti-DIG/DNP-Mix, 1 ml; HRP/AP-Polymer-Mix, 1 ml; AP-Red Solution A, 0.1 ml; AP-Red Solution B, 4 ml; HRP-Green Solution A, 0.2 ml; HRP-Green Solution B, 4 ml; Nuclear Blue Solution, 4 ml; Mounting Solution (alcoholic), 1 ml; Control Slides, 1 pcs.		
C-3022-40	ZytoDot 2C SPEC ERBB2/CEN 17 Probe Kit CE IVD	Digoxigenin/DNP	40
	Incl. Heat Pretreatment Solution EDTA, 500 ml; Pepsin Solution, 4ml; Probe, 0.4 ml; Wash Buffer SSC, 500 ml; 20x Wash Buffer TBS, 2x 50 ml; Anti-DIG/DNP-Mix, 4 ml; HRP/AP-Polymer-Mix, 4 ml; AP-Red Solution A, 0.4 ml; AP-Red Solution B, 15 ml; HRP-Green Solution A, 0.8 ml; HRP-Green Solution B, 15 ml; Nuclear Blue Solution, 20 ml; Mounting Solution (alcoholic), 4 ml; Control Slides, 2 pcs.		

* Using 10 µl probe solution per test. CE IVD only available in certain countries. All other countries research use only! Please contact your local dealer for more information.