



FlexISH®

Products for flexible FISH

## Flexible FISH ERBB2 Testing

# FlexISH®

Bringing *flexibility* to Your FISH



Simply Adapt the *Hybridization Time* to Your Needs

ZYTOVISION  
Molecular diagnostics simplified

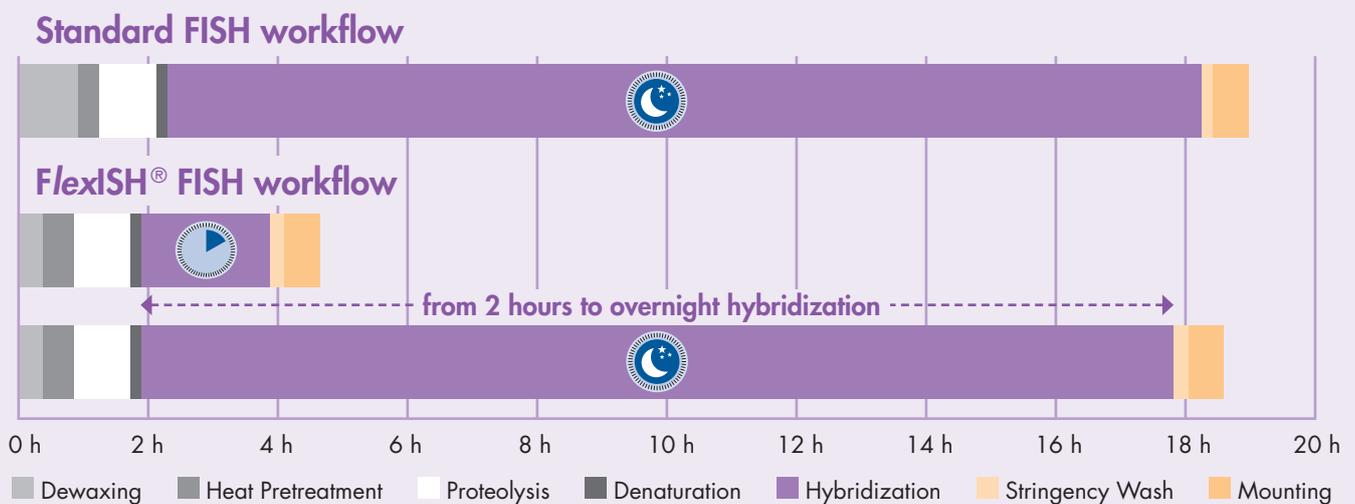
## Importance of ERBB2 Testing

Breast cancer is the most commonly diagnosed cancer among women worldwide. It is estimated that 1.7 million new cases are diagnosed per year, accounting for 25 % of all new cancer cases in women<sup>1</sup>.

The proto-oncogene ERBB2 is amplified in approximately 20 % of all breast cancers and is correlated with a poor prognosis<sup>2</sup>. Breast cancer patients harboring ERBB2 amplification are addressed for a targeted therapy with trastuzumab (Herceptin®), a humanized monoclonal antibody directed against the extracellular portion of the ERBB2 protein. This treatment is associated with significantly prolonged overall survival and time of tumor progression<sup>3</sup>.

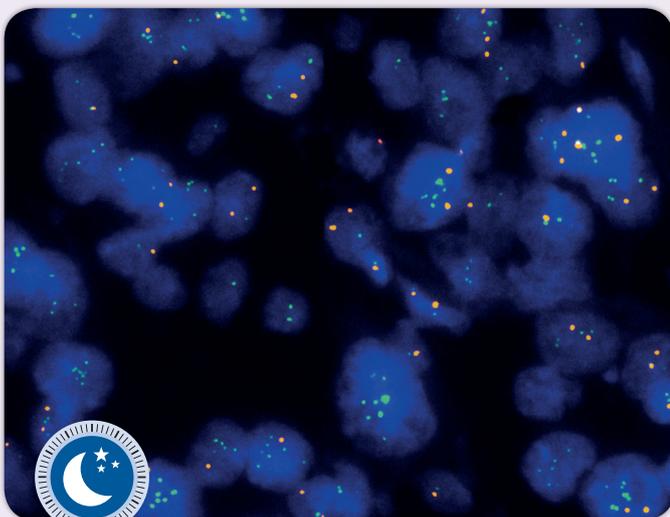
## FlexISH® – Reliable ERBB2 Results obtainable in 1 Day!

With the use of the **FlexISH® ERBB2/CEN 17 Dual Color Probe** in combination with the **FlexISH®-Tissue Implementation Kit** reliable results can be obtained already within **4.5 hours**. The **FlexISH® protocol** can also be incorporated into the routine workflow with overnight hybridization providing the highest flexibility.



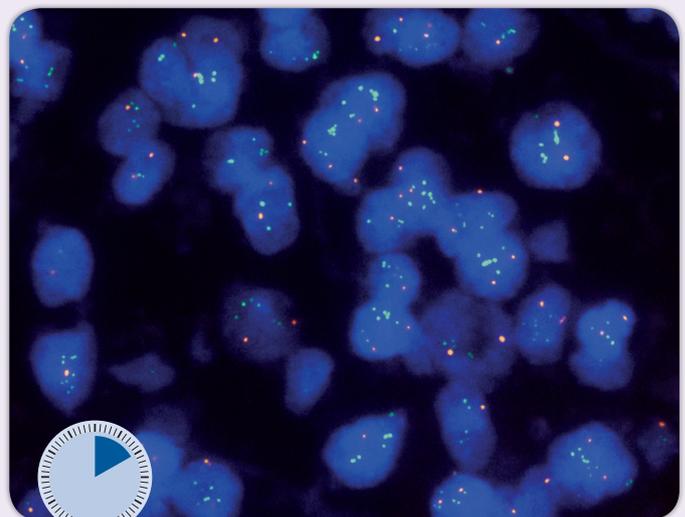
## High-Quality FISH Results with flexible Hybridization Time

There is an excellent correlation between the FISH results obtained after overnight and short hybridization periods with regard to signal brightness, signal-to-noise ratio, and the diagnostic result<sup>4</sup>.



Hybridization time:  
Overnight

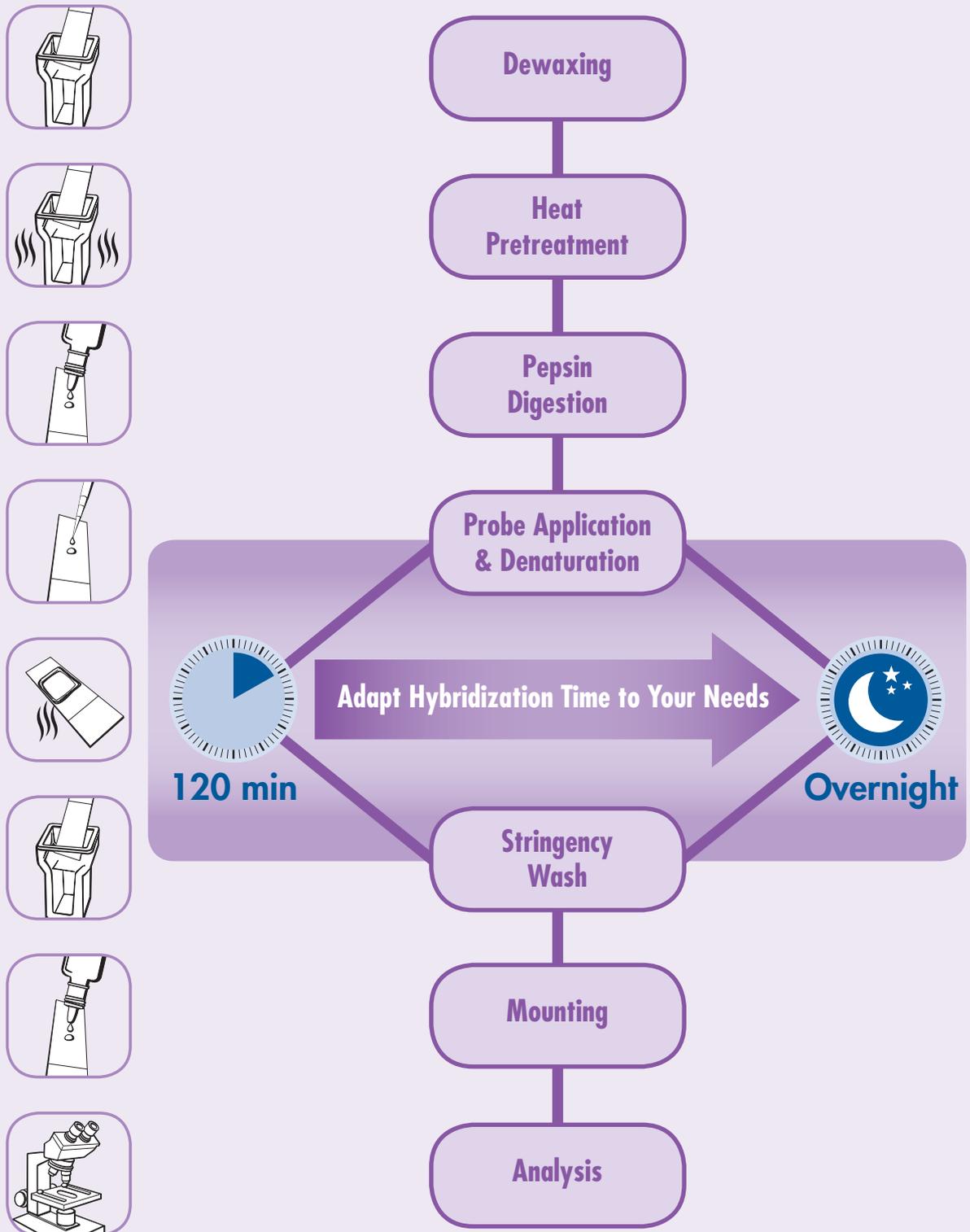
FlexISH ERBB2/CEN 17 Dual Color Probe



Hybridization time:  
120 min

FlexISH ERBB2/CEN 17 Dual Color Probe

## Workflow Schedule



## FlexISH® brings Flexibility to Your FISH

- **FlexISH®** maximizes your flexibility in terms of time and laboratory management. Hybridization time can be varied between **2 hours** and **overnight**.
- With a hybridization temperature of 37°C the **FlexISH®** protocol is fully compatible with routine workflows in pathology laboratories.
- In a recent comparison study, overnight and short hybridization periods showed excellent correlation between the FISH results obtained with **FlexISH®**, **ZytoLight®**, and PathVysion ERBB2 probes<sup>4</sup>.
- Short hybridization time does not negatively affect the performance, specimen quality or diagnostic result<sup>4</sup>.

### References

1. World Health Organization 2012: [www.who.int/en](http://www.who.int/en) (July 15, 2015).

2. Brown-Glabermann U, et al. (2014) *Oncology* (Williston Park) 28: 281-9.

3. Bourdeanu L & Luu T (2014) *J Adv Pract Oncol* 5: 246-60.

4. Brockhoff G, et al. (2016) *Histopathology* [Epub ahead of print].

### FISH Protocols in Comparison

	ZytoLight®	Dako IQFISH	FlexISH®
<b>Pretreatment</b>	127 min	108 min	103 min
<b>Denaturation</b>	10 min at 75°C	10 min at 66°C	10 min at 75°C
<b>Hybridization</b>	overnight at 37°C	1-2 h at 45°C	flexible between 2 h and overnight at 37°C
<b>Stringency Wash</b>	5 min at 37°C 5 min at 37°C	10 min at 63°C 2x 3 min at RT	10 min at 72°C 3 min at RT
<b>Dehydration &amp; Mounting</b>	33 min	36 min	33 min
<b>Total Time</b>	~ 19 h	~ 4 - 5 h	~ 4.5 h - 19 h

The indicated times include 15 min protease treatment, 15-30 min for the air drying steps, and 16 h for overnight incubation. All other times and temperatures are according to the respective instruction for use.

The FlexISH® protocol uses standard incubation temperatures and is thus fully compatible with routine workflows in pathology laboratories.

### FlexISH® ERBB2/CEN 17 Dual Color Probe

Prod. No.	Product	Label	Tests* (Volume)
Z-2166-50	FlexISH ERBB2/CEN 17 Dual Color Probe CE IVD	●/●	5 (50 µl)
Z-2166-200	FlexISH ERBB2/CEN 17 Dual Color Probe CE IVD	●/●	20 (200 µl)
<b>Related Products</b>			
Z-2182-5	FlexISH-Tissue Implementation Kit CE IVD Incl. Heat Pretreatment Solution Citric, 150 ml; Pepsin Solution, 1 ml; 5x FlexISH Wash Buffer, 150 ml; DAPI/DuraTect-Solution, 0.2 ml		5
Z-2182-20	FlexISH-Tissue Implementation Kit CE IVD Incl. Heat Pretreatment Solution Citric, 500 ml; Pepsin Solution, 4 ml; 5x FlexISH Wash Buffer, 500 ml; DAPI/DuraTect-Solution, 0.8 ml		20

\* 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.

#### FlexISH®-Tissue Implementation Kit

FlexISH®-Tissue Implementation Kit contains all necessary reagents to perform successful and flexible FISH experiments.

- Heat Pretreatment Solution Citric
- Pepsin Solution
- 5x FlexISH® Wash Buffer
- DAPI/DuraTect™-Solution



For more product information please contact [info@zytovision.com](mailto:info@zytovision.com) or your local dealer.

