

PATHWAY[®] anti-HER2/neu (4B5) Rabbit Monoclonal Primary Antibody

FDA approved to identify HER2-low expression in mBC



Predictive

PATHWAY® ANTI-HER2/NEU (4B5) RABBIT MONOCLONAL PRIMARY ANTIBODY

PATHWAY° anti-HER2/neu (4B5) Rabbit Monoclonal Primary Antibody

Identifying patients with low expression of HER2 who may benefit from ENHERTU®

INTENDED USE

The PATHWAY anti-HER2/neu (4B5) Rabbit Monoclonal Primary Antibody (PATHWAY anti-HER2 (4B5) antibody) is a rabbit monoclonal antibody intended for laboratory use for the semi-quantitative detection of HER2 antigen by IHC in sections of formalin-fixed, paraffin-embedded normal and neoplastic tissue using the *ultra*View Universal DAB Detection Kit on a BenchMark Ultra IHC/ISH instrument.

This IHC device is indicated for identifying patients who are eligible for Herceptin[®], KADCYLA[®] (IHC 3+ or 2+/ISH+) or ENHERTU[®] (IHC 1+ or 2+/ISH-).

	STAINING PATTERN	SCORE	RECOMMENDED REPORTING STATUS	CLINICAL APPLICATION
BREAST CANCER	No membrane staining is observed OR Faint, partial staining of the membrane in 10% or less of cancer cells*	0	HER2 Negative	None
	Faint, partial staining of the membrane in greater than10% of cancer cells*	1+	HER2-low expression	ENHERTU® (fam-trastuzumab deruxtecan-nxki)
	Weak to moderate complete staining of the membrane in greater than 10% of the cancer cells	2+** Reflex test: HER2 non-amplified	HER2-low expression	
		2+** Reflex test: HER2 Amplified	HER2 Positive/ overexpression	HERCEPTIN® (trastuzumab)
	Intense complete staining of the membrane in greater than 10% of the cancer cells	3+	HER2 Positive/ overexpression	KADCYLA® (trastuzumab emtansine)

*Recommend re-reading by a second pathologist for cases with "faint, partial staining of the membrane" and %TC near the threshold of 10%, when the range of %TC is between 5%-25%

**Recommend reflex test to assess gene amplification per ASCO/CAP guidance

This product should be interpreted by a qualified pathologist in conjunction with histological examination, relevant clinical information, and proper controls. This antibody is intended for in vitro diagnostic (IVD) use.

For more information on ENHERTU[®], (fam-trastuzumab deruxtecan-nxki) please refer to the FDA-approved product labeling.

PATHWAY® anti-HER2/neu (4B5) Rabbit Monoclonal Primary Antibody

HER2-low is now an actionable classification in mBC



NOW CLASSIFIED as HER2-LOW²⁰

Approximately 40-50% percent of breast cancer patients have tumors that do not demonstrate amplification of the HER2 gene and do not over express the receptor; however, low levels of HER2 expression are detected.²⁰ HER2-low expressing cases (IHC score 1+ or 2+/ISH-) are typically considered HER2-negative and excluded from HER2-targeted treatment options.⁸

Recently, benefit has been observed with the anti-HER2 treatment fam-trastuzumab deruxtecan-nxki (ENHERTU®) in breast cancer patients with low levels of HER2 expression.¹⁹⁻²¹

- Fam-traastuzumab deruxtecan-nxki is an antibody-drug conjugate that contains a HER2 targeting monoclonal antibody (trastuzumab) base, a cleavable linker, and a cell membrane permeable exatecan derivative (a topoisomerase I inhibitor payload).¹⁰
- In vitro diagnostics for the determination of HER2 status in breast cancer patients are important to aid the clinician in determination of therapy with trastuzumab (Herceptin®), trastuzumab emtansine (KADCYLA®) or fam-trastuzumab deruxtecan-nxki (ENHERTU®).¹¹
- The immunohistochemical detection of HER2 protein expression may be used as an aid in the assessment of breast cancer patients for whom the treatments Herceptin[®], KADCYLA[®] or ENHERTU[®] are being considered.

HER2 clinical utility as evidenced by DESTINY-Breast04²⁰

ENHERTU[•] (fam-trastuzumab deruxtecan-nxki) demonstrated a statistically significant and clinically meaningful progression-free survival benefit in HR+/HER2-low patients & all HER2-low patients (HR+ & HR-)²⁰



For more information on ENHERTU, please refer to the FDA-approved product labeling.

PATHWAY[®] anti-HER2/neu (4B5) Rabbit Monoclonal Primary Antibody

Continuing to lead the way in HER2 testing

The use of pre-diluted PATHWAY HER2 (4B5),³⁷ in combination with the fully automated VENTANA BenchMark Ultra IHC/ISH slide staining instrument, standardizes all IHC Processes from baking through staining, and reduces the possibility of human error. It also minimizes inherent variability resulting from individual reagent dilution and other processes found in manual and semi-automated IHC methods.

The PATHWAY HER2 (4B5) Primary Antibody empowers you to:

- Achieve consistently high proficiency assessment scores with HER2 (4B5) antibody, compared to other clones³⁸
- Employ the most widely adopted and reliable HER2-IHC primary antibody³⁸



• Demonstrate high concordance with HER2 FISH^{39,40}

NordiQC comparison data for HER2 clones³⁸

PATHWAY[®] HER2 (4B5) CDx can identify HER2-low in mBC with Reproducibility³⁷

An inter-laboratory reproducibility (ILR) study of PATHWAY HER2 (4B5) CDx for HER2-low (IHC 1 + or IHC 2+/ISH-) assessment demonstrated a **high concordance** across **5 days, 3 sites, and 6 readers** for HER2-low classification.³⁷



Laboratories are responsible for ensuring the reliability and accuracy of their results, by compliance with accreditation and proficiency testing requirements for HER2 testing assays.¹³

To calculate APA, ANA and OPA, HER2 IHC scores "I+" and "2" were categorize as "positive" as they were eligible for DESTINY-Breast04, and HER2 IHC scores "0," ">0, <I+," and "3+" were categorize as "negative"³⁷

Ordering Information

Product name	Catalog number	Ordering Code	Quantity
PATHWAY® anti-HER2/neu (4B5) Rabbit Monoclonal Primary Antibody	790-2991	05278368001	50 tests
ultraView Universal DAB Detection Kit	760-500	05269806001	250 tests
PATHWAY® HER2 4 in 1 Control Slides	781-2991	05273510001	10 tests

Automation: optimized for use on BenchMark Ultra IHC/ISH instruments

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Roche Diagnostics 9115 Hague Road Indianapolis, IN 46256

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