

**Rabbit Anti-HER2 [SP3]: RM0446, RM0446RTU7**

**Intended Use:** For Research Use Only

**Description:** HER2 is a receptor tyrosine kinase of the c-erbB family. It is closely related in structure to the epidermal growth factor receptor. c-erbB-2 oncoprotein is detectable in a proportion of breast and other adenocarcinomas, as well as transitional cell carcinomas. In the case of breast cancer, expression determined by immunohistochemistry has been shown to be associated with poor prognosis. HER2 is one of the four members of the ErbB receptor family of transmembrane receptor-like tyrosine kinases. The kinase activity of ErbB2 can be activated without ligand if it is overexpressed, and by association with other ErbB proteins. Overexpression of ErbB2 is detected in almost 40% of human breast cancers. Each laboratory should validate it by its own procedure.

**Specifications**

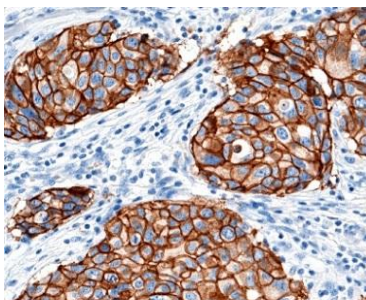
Clone: SP3  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human  
 Immunogen: Recombinant fragment of HER2 protein  
 Localization: Membrane  
 Formulation: Antibody in PBS pH 7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC  
 Package:

Description	Catalog No.	Size
HER2 Concentrated	RM0446	1 ml
HER2 Prediluted	RM0446RTU7	7 ml

**IHC Procedure\***

Positive Control Tissue: Breast carcinoma  
 Concentrated Dilution: 25-100  
 Pretreatment: Citrate pH 6.0 or EDTA pH8.0, 15 min Pressure Cooker or 30-60 min water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human breast invasive ductal carcinoma tissue stained with anti-HER2 using DAB

**References:**

1. pH-responsive artemisinin derivatives and lipid nanoparticle formulations inhibit growth of breast cancer cells in vitro and induce down-regulation of HER family members. Zhang YJ et al. PLoS One 8:e59086 2013.
2. HER2/HER3 regulates extracellular acidification and cell migration through MTK1 (MEKK4). Sollome JJ et al. Cell Signal 26:70-82 2013.
3. Expression of cell cycle-associated proteins in non-muscle-invasive bladder cancer: correlation with intravesical recurrence following transurethral resection. Behnsawy HM et al. Urol Oncol 29:495-501 2011.
4. Estrogen induces apoptosis in estrogen deprivation-resistant breast cancer through stress responses as identified by global gene expression across time. Ariazi EA et al. Proc Natl Acad Sci U S A 108:18879-86 2011.
5. Silencing of ErbB3/ErbB2 signaling by immunoglobulin-like Necl-2. Kawano S et al. J Biol Chem 284:23793-805 2009.