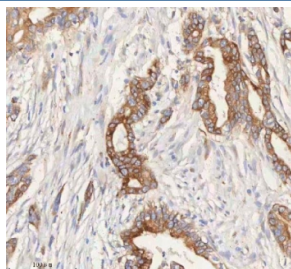


HER4 Antibody Rabbit Polyclonal / ERBB4 (RQ8802)

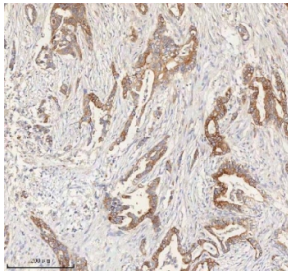
Catalog No.	Formulation	Size
RQ8802	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

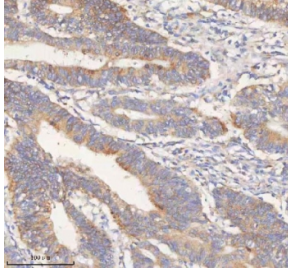
Availability	1-3 days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity chromatography
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q15303
Localization	Cytoplasmic, plasma membrane, nuclear
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This HER4 antibody is available for research use only.



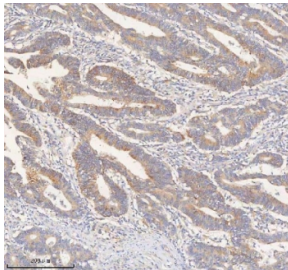
HER4 Antibody Rabbit Polyclonal Pancreas Ductal Adenocarcinoma IHC. Immunohistochemistry of HER4 antibody in human pancreas ductal adenocarcinoma tissue. FFPE human pancreatic ductal adenocarcinoma sections were subjected to heat-induced epitope retrieval by boiling in pH 8 EDTA for 20 minutes followed by cooling prior to staining. The rabbit polyclonal HER4 antibody was used as the detecting antibody. HRP-DAB brown staining is observed predominantly along the membranous and cytoplasmic compartments of malignant ductal epithelial cells, while surrounding stromal elements show comparatively lower background staining. The staining pattern is consistent with Erb-B2 receptor tyrosine kinase 4 expression in pancreatic carcinoma tissue.



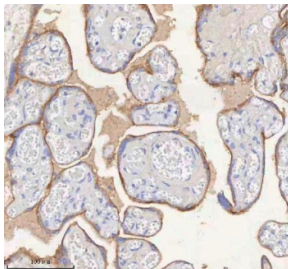
HER4 Antibody Pancreas Ductal Adenocarcinoma IHC. Immunohistochemistry staining of FFPE human pancreas ductal adenocarcinoma tissue with HER4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



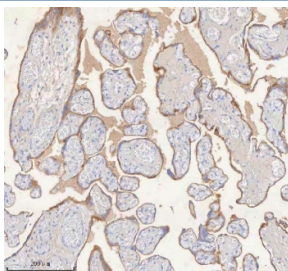
HER4 Antibody Colon Adenocarcinoma IHC. Immunohistochemistry of HER4 antibody in human colon adenocarcinoma tissue. FFPE human colon adenocarcinoma sections were subjected to heat-induced epitope retrieval by boiling in pH 8 EDTA for 20 minutes followed by cooling prior to staining. The rabbit polyclonal HER4 antibody was used as the detecting antibody. HRP-DAB brown staining is observed predominantly in the membranous and cytoplasmic compartments of malignant glandular epithelial cells, while adjacent stromal elements display comparatively lower background staining. The staining pattern is consistent with Erb-B2 receptor tyrosine kinase 4 expression in colon adenocarcinoma tissue.



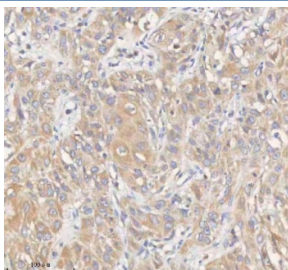
HER4 Antibody Human Colon Adenocarcinoma Tissue IHC. Immunohistochemistry staining of FFPE human colon adenocarcinoma tissue with HER4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



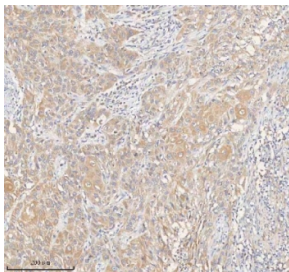
HER4 Antibody FFPE Placenta IHC. Immunohistochemistry staining of FFPE human placental tissue with HER4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



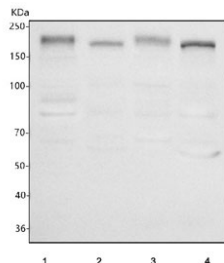
HER4 Antibody Human Placental Tissue IHC. Immunohistochemistry of HER4 antibody in human placental tissue. FFPE human placenta sections were subjected to heat-induced epitope retrieval by boiling in pH 8 EDTA for 20 minutes followed by cooling prior to staining. The rabbit polyclonal HER4 antibody was used as the detecting antibody. HRP-DAB brown staining is observed predominantly along the membranous borders of trophoblastic cells with additional cytoplasmic signal, while surrounding stromal components display lower background staining. The staining pattern is consistent with Erb-B2 receptor tyrosine kinase 4 expression in placental tissue.



HER4 Antibody Human Urothelial Carcinoma Tissue IHC. Immunohistochemistry staining of FFPE human urothelial carcinoma tissue with HER4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



HER4 Antibody Urothelial Carcinoma IHC. Immunohistochemistry staining of FFPE human urothelial carcinoma tissue with HER4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



HER4 Antibody WB. Western blot testing of 1) human MCF7, 2) rat brain, 3) rat PC-12 and 4) mouse brain tissue lysate with HER4 antibody. Predicted molecular weight: 147-180kDa (precursor), 120, 80 kDa (cleaved forms).

Description

HER4 antibody rabbit polyclonal recognizes Erb-B2 receptor tyrosine kinase 4, also known as ERBB4, a member of the epidermal growth factor receptor family of receptor tyrosine kinases. HER4 antibody, also referred to as ERBB4 antibody and ErbB4 antibody in the literature, detects a transmembrane receptor that regulates cellular proliferation, differentiation, and survival signaling. This receptor plays a context-dependent role in epithelial development, neural function, and tumor biology.

HER4 belongs to the ERBB receptor family, which includes EGFR, HER2, and HER3. Upon binding to ligands such as neuregulins and other EGF-like growth factors, HER4 undergoes dimerization and autophosphorylation, initiating downstream signaling through PI3K-AKT, MAPK, and JAK-STAT pathways. These cascades influence cell cycle progression, differentiation, apoptosis, and transcriptional regulation. Unlike certain other ERBB family members, HER4 can undergo regulated intramembrane proteolysis, releasing an intracellular domain that translocates to the nucleus and modulates gene expression.

The ERBB4 gene is located on chromosome 2q34 and generates multiple isoforms through alternative splicing. These isoforms differ in their cytoplasmic domain composition and signaling potential, contributing to variable biological effects depending on tissue context. HER4 expression has been documented in mammary epithelium, cardiac tissue, neural tissue, and other epithelial structures, where it contributes to developmental processes and tissue homeostasis.

Dysregulated HER4 signaling has been implicated in breast cancer, ovarian carcinoma, and other malignancies. Depending on isoform expression and cellular environment, HER4 may demonstrate differentiation-associated or tumor-modulating functions. Evaluation of ERBB4 expression is therefore important in cancer biology and growth factor pathway research.

This rabbit polyclonal HER4 antibody is suitable for research applications investigating ERBB4 signaling, receptor tyrosine kinase biology, and tumor-associated growth factor pathways.

For detection of total HER4 expression, see our [HER4 antibody page](#).

Application Notes

Optimal dilution of the HER4 antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids E1231-K1291) was used as the immunogen for the HER4 antibody.

Storage

After reconstitution, the HER4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.