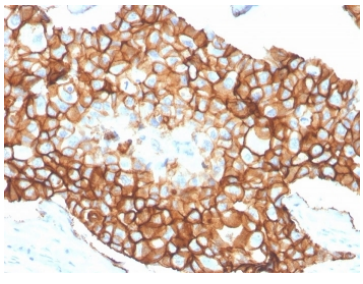
Recombinant ErbB2 Antibody / HER2 [clone ERBB2/4376R] (V9132)

Catalog No.	Formulation	Size
V9132-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9132-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9132SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

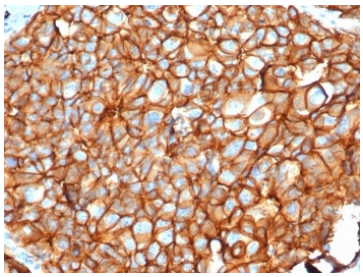
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	ERBB2/4376R
Purity	Protein A/G affinity
UniProt	IDP04626
Localization	Cell Surface
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant ErbB2 antibody is available for research use only.



IHC staining of FFPE human breast carcinoma tissue with recombinant ErbB2 antibody (clone ERBB2/4376R) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



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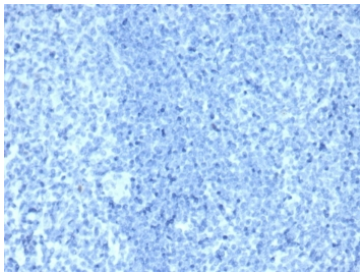
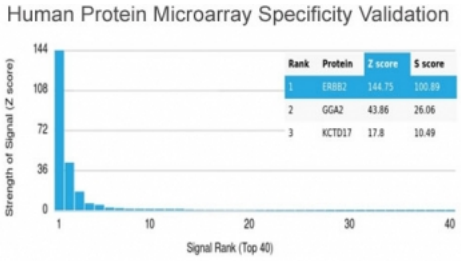


Negative control: IHC staining of FFPE human tonsil tissue with recombinant ErbB2 antibody (ERBB2/4376R) at 2ug/ml in PBS for 30min RT. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant ErbB2 antibody (clone ERBB2/4376R). These results demonstrate the foremost specificity of the ERBB2/4376R mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Recombinant ErbB2 antibody detects ErbB2, also known as HER2, a receptor tyrosine kinase encoded by the ERBB2 gene. ErbB2 is a member of the epidermal growth factor receptor family and functions as a preferred dimerization partner for other ErbB receptors. Because ErbB2 amplification drives tumorigenesis in breast and gastric cancers, Recombinant ErbB2 antibody is indispensable in oncology, pathology, and therapeutic development.

ErbB2 consists of an extracellular receptor domain, a single transmembrane helix, and an intracellular tyrosine kinase domain. While ErbB2 lacks a direct ligand, its heterodimerization with EGFR and ErbB3 activates signaling cascades including MAPK, PI3K/AKT, and STAT pathways. These pathways regulate proliferation, differentiation, angiogenesis, and survival. Overexpression of ErbB2 is a well-established predictor of aggressive tumor biology and targeted therapy responsiveness.

The Recombinant ErbB2 antibody clone ERBB2/4376R provides specific and reproducible recognition. Recombinant technology ensures consistent performance across batches, minimizing variability. Clone ERBB2/4376R has been referenced in peer-reviewed publications investigating breast carcinoma, gastric adenocarcinoma, and receptor tyrosine kinase signaling. Its versatility makes it suitable for immunohistochemistry, immunoblotting, and flow cytometry.

Research using clone ERBB2/4376R has highlighted how ErbB2 overexpression correlates with poor prognosis in breast and gastric cancers. In translational research, ErbB2 detection has guided the development and clinical use of monoclonal antibodies and kinase inhibitors, transforming oncology practice. This antibody has also supported mechanistic studies of dimerization, receptor trafficking, and signaling regulation in cancer biology.

NSJ Bioreagents provides this Recombinant ErbB2 antibody to support oncology, receptor biology, and therapeutic development research. Alternate designations include HER2 antibody, neu oncogene protein antibody, epidermal growth

factor receptor 2 antibody, receptor tyrosine kinase ErbB2 antibody, and breast cancer marker antibody.

For broad detection of HER2 (ErbB2) as a receptor tyrosine kinase, see our HER2 antibody.

Application Notes

Optimal dilution of the recombinant ErbB2 antibody should be determined by the researcher.

Immunogen

Recombinant extracellular domain of human c-erbB2/HER2 was used as the immunogen for the recombinant ErbB2 antibody.

Storage

Aliquot the recombinant ErbB2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.