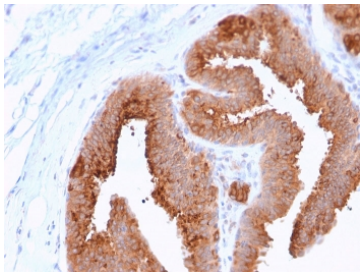
HER4 Antibody / ERBB4 [clone ERBB4/2581] (V7740)

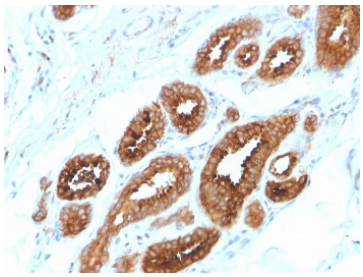
Catalog No.	Formulation	Size
V7740-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7740-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7740SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ERBB4/2581
Purity	Protein G affinity chromatography
UniProt	Q15303
Localization	Cytoplasmic, plasma membrane, nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This HER4 antibody is available for research use only.



IHC staining of FFPE human breast carcinoma with HER4 antibody (clone ERBB4/2581). HIER: boil tissue sections in 10mM Tris with 1mM EDTA, pH 9, for 10-20 min followed by cooling at RT prior to testing.



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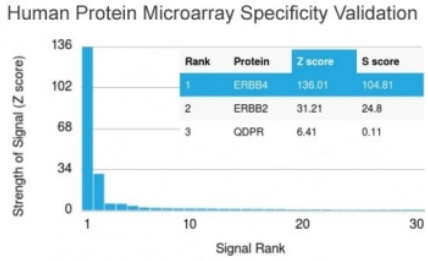
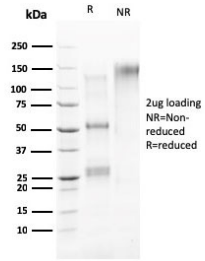


Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using HER4 antibody (clone ERBB4/2581). These results demonstrate the foremost specificity of the ERBB4/2581 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination 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.



SDS-PAGE analysis of purified, BSA-free HER4 antibody (clone ERBB4/2581) as confirmation of integrity and purity.

Description

The EGF receptor family comprises several related receptor tyrosine kinases that are frequently overexpressed in a variety of carcinomas. Members of this receptor family include EGFR (HER1), Neu (ErbB-2, HER2), ErbB-3 (HER3) and ErbB-4 (HER4), which form either homodimers or heterodimers upon ligand binding. The gene encoding ErbB-4 is expressed as a full-length protein, which produces a short membrane-anchored cytoplasmic domain fragment and a long ectodomain fragment. The short fragment is heavily tyrosine phosphorylated and possesses tyrosine kinase catalytic activity toward an exogenous substrate. Proteolytic cleavage of ErbB-4 is promoted by the binding of heregulin. ErbB-4 is involved in cell proliferation and differentiation and its expression is highest in breast carcinoma cell lines, normal skeletal muscle, heart, pituitary, brain and cerebellum. Its expression in breast cancer, pediatric brain cancer and other types of carcinomas has been reported in studies which suggest ErbB4 expression is involved in both normal tissue development and carcinogenesis.

Application Notes

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

Immunogen

A recombinant human partial protein (amino acids 1116-1269) was used as the immunogen for the HER4 antibody.

Storage

Store the HER4 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).