

JOT0008-1: Anti-Her2 VHH antibody

Clonality :	Monoclonal
Application :	IHC,IF
Reactivity :	Human
Gene :	ERBB2
Gene ID :	2064
Uniprot ID :	P04626
Alternative Name :	ERBB2, HER2, MLN19, NEU, NGL
Isotype :	Camelid VHH

Description

Alpaca derived anti-HER2 VHH single domain antibody (molecular weight:14.1 kDa) with a 6*His tag at its C-terminal, expressed in E. coli under conditions free from animal derived components.

Receptor tyrosine-protein kinase erbB-2, also known as Her2, is a protein that in humans is encoded by the ERBB2 gene. The ErbB family consists of four closely related tyrosine kinase receptors that act as potent mediators of normal cell growth and development. Aberrant expression or function of one or more of these receptors can play a major role in the development and evolution of cancer. Her2 has been implicated in the evolution of both breast and gastric cancers, and is evident in other cancer types such as ovarian and salivary gland tumors. Her2 possesses an active tyrosine kinase domain, but no direct ligand has been identified yet. Her2 is the preferred binding partner to the other members of the ErbB family and is thought to act primarily through the Ras-MAPK, PI3k-PKB/Akt, and PLC-PKC signalling pathways.

Specificity: Receptor tyrosine-protein kinase erbB-2 (HER2)

This is a product from [Jotbody](#), Hong Kong. This antibody is made available worldwide by ABEOMICS Inc.

Product Info

Amount :	100 µg / 50 µg
Purification :	Affinity chromatography purified via Ni-charged resin. Purity > 95% as determined by SDS-PAGE
Content :	1mg/mL Buffer 25 mM TAPS pH8.5, 500 mM NaCl, 5 mM EDTA, 0.09 % NaN3
Storage condition :	4°C; Do not freeze.

Application Note

Positive controls Positive IHC detected in: human lung carcinoma tissue Positive IF detected in: MCF-7 cells.
Recommended dilutions IHC 1:200-1:600 IF 1:200-1:600

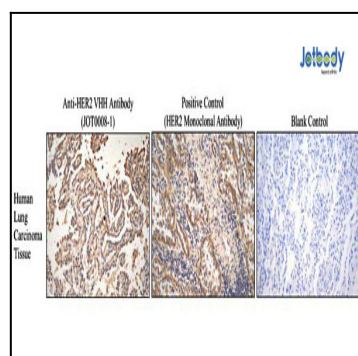


Figure 1: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue slides using anti-HER2 VHH antibody (JOT0008-1) at 2.5 $\mu\text{g/ml}$ and positive control (HER2 monoclonal antibody, a competitor product) (under 20x lens) at 1:500 dilution, respectively. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

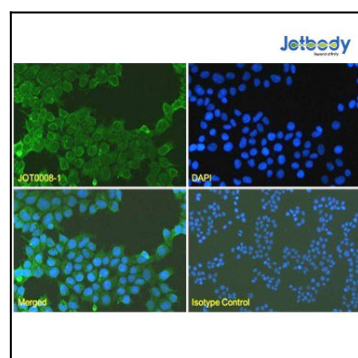


Figure 2: Immunofluorescence analysis of paraformaldehyde fixed MCF-7 cells stained with anti-HER2 VHH antibody (JOT0008-1) at 2.5 $\mu\text{g/ml}$ followed by CoraLite® 488 secondary antibody at 1:200 dilution, showing cytoplasmic staining (under 40x lens). The nuclear stain is DAPI (blue). The isotype control was stained with anti-unknown antibody followed by CoraLite® 488 secondary antibody (under 20x lens).