9853 Pacific Heights Blvd.
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JOT0009-1: Anti-EGFR VHH antibody

Clonality :	Monoclonal
Application :	IHC
Reactivity :	Human
Gene :	EGFR
Gene ID :	1956
Uniprot ID :	P00533
Alternative Name :	EGFR, ERBB, ERBB1, HER1
Isotype :	Camelid VHH

Description

Alpaca derived anti-EGFR VHH single domain antibody (molecular weight:14.8 kDa) with a 6*His tag at its C-terminal, expressed in E. coli under conditions free from animal derived components.

EGFR is a transmembrane glycoprotein that is a member of a family of protein tyrosine kinases crucial in maintaining a normal balance in cell growth and development. Growth factor receptors are involved not only in promoting the proliferation of normal cells but also in the aberrant growth of many types of human tumors. Over-expression of the EGFR gene occurs in carcinomas with and without gene amplification. EGFR and erbB-2 are particularly important in breast cancer because increased production or activation has been associated with poor prognosis. EGFR belongs to a family of growth factor receptors, which also includes ErbB-2/HER-2/neu, ErbB-3/HER-3/neu and ErbB-4/HER-4neu. EGFR can heterodimerize with each of the members of this family.

Specificity: Epidermal Growth Factor Receptor 1 (HER1/EGFR)

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% (4-12% gradient SDS-PAGE)
Content :	1 mg/mL by Nanodrop Buffer: 25 mM TAPS pH8.5, 500 mM NaCl, 5 mM EDTA, 0.1 % Proclin 300
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 :Elisa 1:1000-1:25000 IHC 1:200-1:600 IF 1:200-1:600

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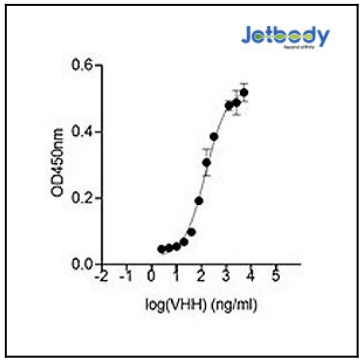

Figure 1: Indirect ELISA showing anti-EGFR VHH antibody (JOT0002-5) binding to purified EGFR. Plates were coated with 100ng/well-purified protein and the binding of JOT0009-1 was assessed in serial dilution from 2.5ng/ml primary antibody in triplicate.

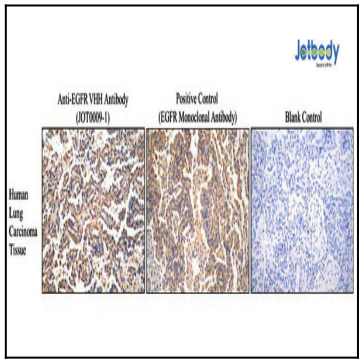

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue slides using anti-EGFR VHH antibody (JOT0009-1) at 2.5ug/ml and positive control (EGFR monoclonal antibody, a competitor product) at 1:500 dilution (under 20x lens), respectively. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

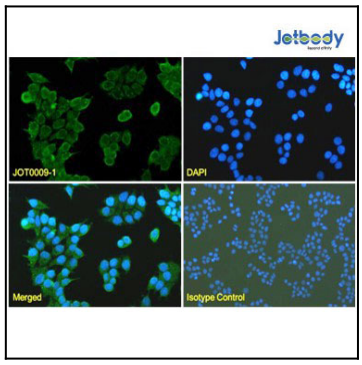

Figure 3: Immunofluorescence analysis of paraformaldehyde fixed MCF-7 cells stained with anti-EGFR VHH antibody (JOT0009-1) at 2.5 µg/ml followed by CoraLite® 488 secondary antibody at 1:200 dilution, showing cytoplasmic staining (under 40x lens). The nuclear stain is DAPI (blue). The isotype control was stained with anti-unknown antibody followed by CoraLite® 488 secondary antibody (under 20x lens).