

Product Information

Anti-Human EGFR Protein A scaffold, Fluorescein-Conjugated

Cat. No.: **AFB-20LY**

This product is for research use only and is not intended for diagnostic use.

Product Overview

The Anti-EGFR Protein A Scaffold molecule is a specific affinity ligand selected against the extra cellular domain of EGFR. The molecule is conjugated at the unique C-terminal cysteine using a maleimide activated fluorescein reagent. The conjugated Anti-EGFR Protein A Scaffold molecule is excellent as a one step reagent for fluorescence studies of EGFR expression on cells as well as for flow cytometry. Staining of paraffin embedded tissues is not recommended.

Antigen Description

The Epidermal Growth Factor Receptor (EGFR, ErbB) is a cell surface glycoprotein of approximately 135 kD (unglycosylated). There are several alternatively spliced forms of EGFR including a secreted soluble form. The EGFR belongs to the family tyrosine kinase receptors which are characterized by an extracellular ligand-binding domain, a single transmembrane and an intracellular domain responsible for transducing the signal. The receptor dimerizes upon binding to EGFR and the transduced signal stimulates cell growth and differentiation. The EGFR is over expressed or mutated in many types of cancers and the receptor as well as the down stream signaling molecules are subjects to several cancer therapeutic interventions.

Specific Activity

Anti-EGFR Protein A scaffold molecule binds to human EGFR. Cross reactivity with other species has not been tested.

Source

Display library

Species Reactivity

human

Expression Host

E. coli

Applications

Fluorescence staining of cells and flow cytometry.

Molecular Weight

13.7 kDa

Storage

Short-term storage at +4°C is recommended. For long-term storage, the protein solution should be aliquoted and then stored at -20°C.

There is no decrease in performance of the Fluorescein-Conjugated Protein A Scaffold molecule after 10 repeated freeze and thaw cycles.

ANTIGEN GENE INFORMATION

Gene Name

[EGFR epidermal growth factor receptor \[Homo sapiens \]](#)

Official Symbol

EGFR

Synonyms

EGFR; epidermal growth factor receptor; ERBB; HER1; mENA; ERBB1; PIG61; OTTHUMP00000159661; OTTHUMP00000159662; OTTHUMP00000159663; OTTHUMP00000209210; OTTHUMP00000209211; proto-oncogene c-ErbB-1; cell growth inhibiting protein 40; cell proliferation-inducing protein 61; receptor tyrosine-protein kinase erbB-1; avian erythroblastic leukemia viral (v-erb-b) oncogene homolog

Gene ID

[1956](#)

mRNA Refseq

[NM_005228](#)

Protein Refseq

[NP_005219](#)

MIM

[131550](#)

UniProt ID

P00533

Chromosome Location

7p12

Pathway

Adherens junction, organism-specific biosystem; Bladder cancer, conserved biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; EGFR downregulation, organism-specific biosystem; ErbB signaling pathway, conserved biosystem.

Function

ATP binding; MAP/ERK kinase activity; actin filament binding; double-stranded DNA binding; epidermal growth factor receptor activity; identical protein binding.