

# Product Information

## Anti-Human EGFR Protein A scaffold

Cat. No.: **AFB-19LY**

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 can advantageously be used for fluorescence and immunohistochemical studies of EGFR-expression on cells and frozen tissue sections. Staining of paraffin embedded tissues is not recommended. The Anti-EGFR Protein A Scaffold molecule is modified with a unique C-terminal cysteine for directed single-point chemical modification, facilitating labeling with fluorescent dyes, biotin or coupling to matrices.

### Antigen Description

The Epidermal Growth Factor Receptor (EGFR, ErbB) is a cell surface glycoprotein of approximately 135 kDa (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 the extracellular domain of human epidermal growth factor receptor (EGFR, ErbB). Cross reactivity with other species has not been tested.

### Source

Display library

### Species Reactivity

human

### Expression Host

E. coli

### Applications

Fluorescence and immunohistochemical staining of cells and frozen tissue sections, flow cytometry.

### Molecular Weight

13.9 kDa

### Storage

At +4°C is recommended for lyophilized protein. For reconstituted protein in physiological buffer, 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 i

## ANTIGEN GENE INFORMATION

### Gene Name

**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 kinase activity; actin filament binding; double-stranded DNA binding; epidermal growth factor receptor activity; identical protein binding.