SM1334P  

Monoclonal Antibody to EGFR / ERBB1 - Purified

Alternate names: EGF Receptor, Epidermal growth factor receptor, Proto-oncogene c-ErbB-1, Receptor tyrosine-protein kinase erbB-1, c-ErbB-1, erbB-1

Quantity: 0.2 mg  
Concentration: 1.0 mg/ml  
Background: Protein kinases are enzymes that transfer a phosphate group from a phosphate donor onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. The protein kinase family is one of the largest families of proteins in eukaryotes, classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. Epidermal Growth factor receptor (EGFR) is the prototype member of the type 1 receptor tyrosine kinases. EGFR overexpression in tumors indicates poor prognosis and is observed in tumors of the head and neck, brain, bladder, stomach, breast, lung, endometrium, cervix, vulva, ovary, esophagus, stomach and in squamous cell carcinoma.

Uniprot ID: P00533  
NCBI: NP_005219.2  
GeneID: 1956  
Host / Isotype: Rat / IgG2a  
Recommended Isotype Controls: SM15P, SM15PX  
Clone: ICR10  
Immunogen: Extracellular domain of human Epidermal Growth Factor Receptor (EGFR) from head and neck carcinoma.

Format:  
State: Liquid purified IgG  
Purification: Ion exchange chromatography  
Buffer System: PBS, pH7.4 containing 0.09% Sodium Azide

Applications:  
Immunoprecipitation.  
Western blotting.  
Flow cytometry: 1/50 - 1/100; Use 10µl of the suggested working dilution to label 10e6 cells in 100µl.  
Immunohistochemistry on frozen sections.  
Recommended positive control: Breast carcinoma.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

For research and in vitro use only. Not for diagnostic or therapeutic work.  
Material Safety Datasheets are available at www.acris-antibodies.com or on request.
Specificity: This antibody recognises the epidermal growth factor receptor (EGF-R), which is over expressed in a high proportion of breast cancer cells and in a range of other carcinomas. High level expression of EGFR is often associated with advanced disease and poor prognosis. This antibody binds to epitope B from EGFR (1, 2) and has an affinity of 6.7 x 10^-9 M.

Species: Human.
Other species not tested.

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

Pictures:
Staining of A431 cells with RAT ANTI HUMAN EGF RECEPTOR (SM1334P) visualised with F(ab')2 RABBIT ANTI RAT IgG:FITC (SP1021F).