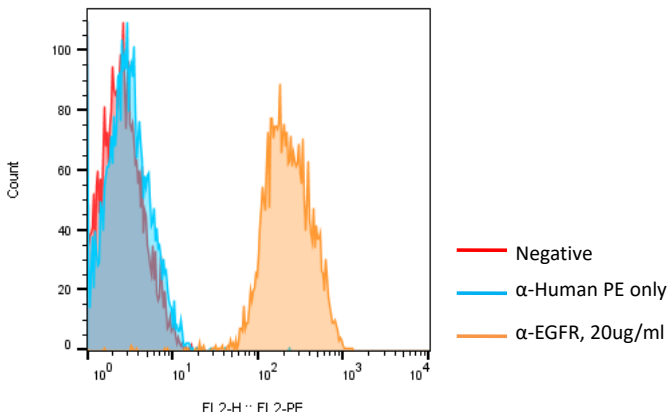


SPECIFICATIONS

Catalog Number	A1020
Product Name	Anti-human EGFR
Source	Recombinant anti-human EGFRmAb produced in HEK293 cells
Original Clone	Cetuximab
Species Reactivity	Human
Isotype	Human IgG1
Formulation	50mM NaAcetate, pH5.2. Sterile
Stability & Storage	1 month at 4°C; 12 months at <-20°C; Avoid repeated freeze-thaw
Purity	>95%
Protein Aggregation	Not obvious on SDS-PAGE
Application	Flow cytometry,ELISA,cell-based assay

DATA

- A.** Detection of EGFR expression on human colorectal adenocarcinoma cell line HCT-15 by flow cytometry. Anti-human EGFR antibody (Cat. # A1020) was incubated with human HCT-15 cells, followed by staining with PE-anti-mouse IgG.



BACKGROUND

Epidermal growth factor receptor (EGFR), also known as ErbB-1, is a transmembrane receptor protein that belongs to the receptor tyrosine kinase family. It is encoded by the EGFR gene and is expressed in various tissues, including the epithelial cells of the skin, lung, gastrointestinal tract, and brain. EGFR is involved in several cellular processes, including cell growth, proliferation, differentiation, and survival, through activation of downstream signaling pathways such as the MAPK/ERK and PI3K/Akt pathways. However, dysregulation of EGFR signaling has been linked to cancer development and progression in various cancers, including non-small cell lung, head and neck, colorectal, and pancreatic cancers. Therefore, EGFR has become an attractive therapeutic target in oncology. Small molecular inhibitors, such as gefitinib, erlotinib, and afatinib, and monoclonal antibodies, such as cetuximab and panitumumab, have been developed to target EGFR for the treatment of various cancers, particularly in patients with EGFR mutations or overexpression.

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