TECHNICAL DATA SHEET

EGFR MAb

Catalog Number: CSB0016

DESCRIPTION

Target:	EGFR
Target aliases:	ERBB1, ERRP, ERBB, HER1, EGFR VIII, NISBD2, PIG61, MENA
Fc isotype:	Mouse IgG2a
Membrane proteome specificity:	Monospecific for 6,000 membrane proteins tested
Species reactivity:	Human (others untested)
Epitope:	
Fc modifications:	C-terminal Avitag[1], disabled Fc-γ receptor binding[2]
Source:	Recombinant CHO expression; purified by Protein A chromatography
Formulation:	Endotoxin Free PBS pH 7.4, sterile-filtered
Concentration:	1 mg/ml

1. A peptide tag that can be biotinylated in vitro using the biotin ligase enzyme (BirA).
2. Mutated Fc-γ receptor binding site to minimize non-specific antibody binding to endogenously-expressed Fc-γ receptors on target cells.

EGFR TARGET INFORMATION

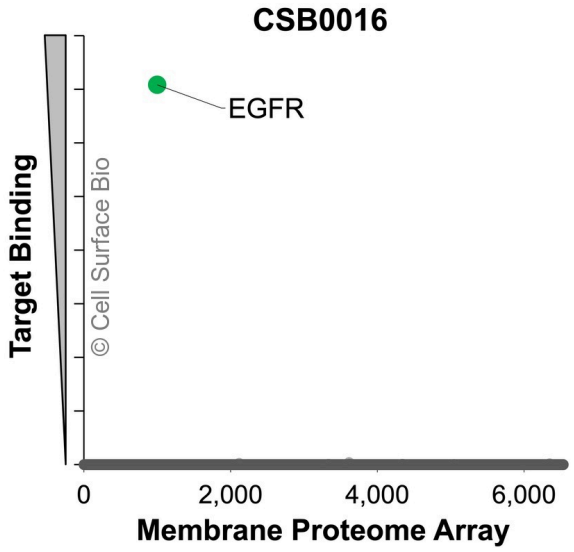
EGFR is a single-pass transmembrane protein and member of the protein kinase superfamily that binds proteins in the epidermal growth factor family, causing receptor dimerization and tyrosine autophosphorylation, which activate signaling cascades. EGFR is involved in cell proliferation and migration and plays a role in hepatitis C infection and the cytokine storm in severe COVID-19. Mutations in the EGFR gene are also associated with lung cancer. (NCBI Gene: 1956, UniProtKB/Swiss-Prot: P00533). Other names: ERBB1, ERRP, ERBB, HER1, EGFR VIII, NISBD2, PIG61, MENA

SHIPPING AND STORAGE

Shipping:	Shipped at ambient temperature. Store at 4°C.
Stability & Storage:	Stable for 12 months from date of receipt when stored at 4°C. Avoid repeated freeze-thaw cycles.

VALIDATION DATA

Membrane Proteome Specificity

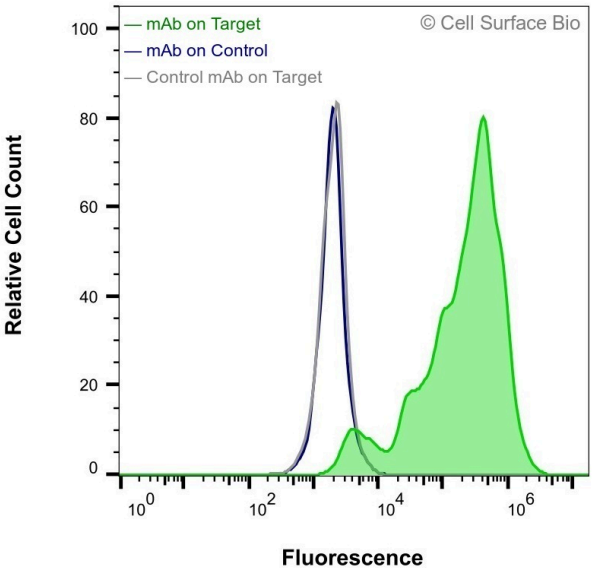


The specificity of EGFR Monoclonal Antibody (CSB0016) was tested on the Membrane Proteome Array™ and shown to be specific for human EGFR.

The Membrane Proteome Array™ contains 6,000 different human membrane proteins, each expressed in unfixed human cells to ensure native conformation and post-translational modifications. The Membrane Proteome Array™ represents the industry standard for determining the binding specificity of antibodies and other protein ligands.

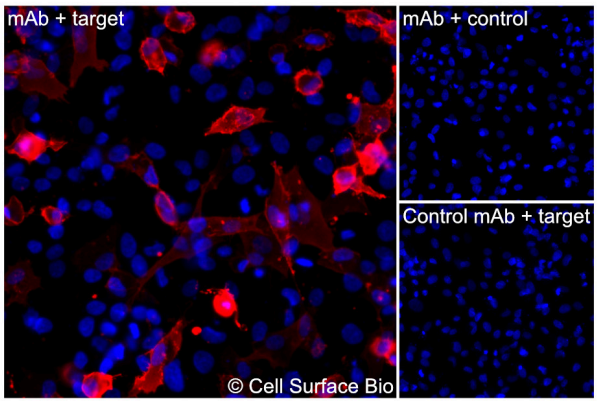
www.cellsurfacebio.com info@cellsurfacebio.com +1 (215) 987-0728

Applications	Conditions	Recommended concentration
Flow Cytometry, Extracellular	Live, Unpermeabilized	1 µg/ml



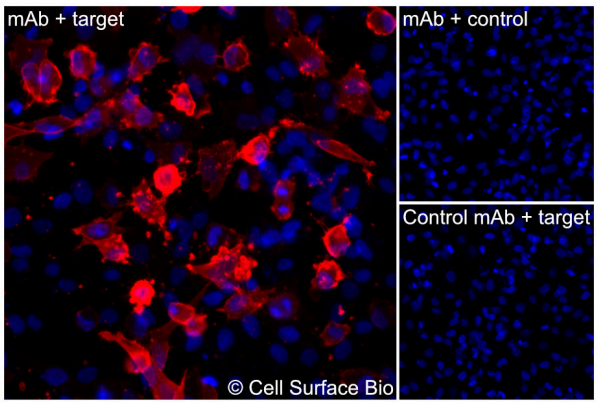
JS-1 cells transiently transfected with human EGFR were stained with EGFR Monoclonal Antibody (CSB0016) (green) or isotype control antibody (gray), followed by AlexaFluor 647-conjugated anti-mouse IgG secondary antibody. JS-1 cells transiently transfected with an empty control vector were also stained with EGFR Monoclonal Antibody (CSB0016) (blue).

Applications	Conditions	Recommended concentration
Immunofluorescence, Extracellular	Fixed 4% paraformaldehyde	1 µg/ml



(A) JS-1 cells transiently transfected with human EGFR were stained with EGFR Monoclonal Antibody (CSB0016) followed by AlexaFluor 647 anti-mouse IgG secondary antibody (red) and DAPI (blue). (B) JS-1 cells transiently transfected with an empty control vector stained with EGFR Monoclonal Antibody. (C) Isotype control: JS-1 cells transfected with human EGFR and stained with control MAb.

Applications	Conditions	Recommended concentration
Immunofluorescence, Intracellular	Fixed 4% paraformaldehyde, Permeabilized 0.1% Triton X-100	1 µg/ml



(A) JS-1 cells transiently transfected with human EGFR were permeabilized and stained with EGFR Monoclonal Antibody (CSB0016) followed by AlexaFluor 647 anti-mouse IgG secondary antibody (red) and DAPI (blue). (B) JS-1 cells transiently transfected with an empty control vector stained with EGFR Monoclonal Antibody. (C) Isotype control: JS-1 cells transfected with human EGFR and stained with control MAb.