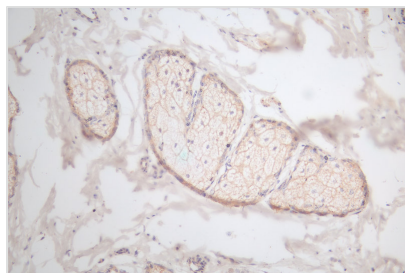




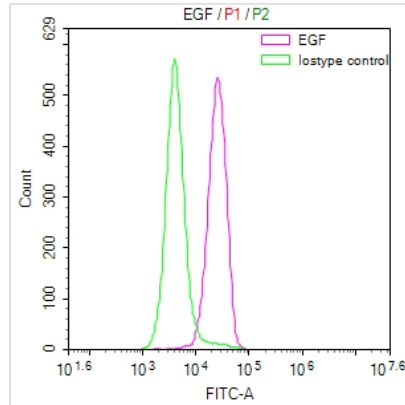
EGF Recombinant Monoclonal Antibody

Product Code	CSB-RA945763A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P01133
Immunogen	A synthesized peptide derived from Human EGF
Species Reactivity	Human
Tested Applications	ELISA, IHC, FC; Recommended dilution: IHC:1:50-1:200, FC:1:50-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer;Cell biology;Signal transduction
Gene Names	EGF
Clone No.	18B12

Image



IHC image of CSB-RA945763A0HU diluted at 1:100 and staining in paraffin-embedded human skin tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit polymer IgG labeled by HRP and visualized using 0.66% DAB.



Overlay Peak curve showing SH-SY5Y cells surface stained with CSB-RA945763A0HU (red line) at 1:50. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody ($1\mu\text{g}/1*10^6$ cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?. Control antibody (green line) was rabbit IgG ($1\mu\text{g}/1*10^6$ cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

CUSABIO's strategy for developing a recombinant monoclonal antibody targeting EGF began with the immunization of a rabbit using a synthesized peptide derived from human EGF protein. Subsequent steps involved isolating B cells from the immunized rabbit and extracting RNA from these cells. The extracted RNA was reverse-transcribed into cDNA, which was employed as a template for extending EGF antibody genes using degenerate primers. These engineered EGF antibody genes were then incorporated into a plasmid vector and introduced into host cells for expression. The resulting EGF recombinant monoclonal antibody was isolated from the cell culture supernatant via affinity chromatography and assessed for its suitability in ELISA, IHC, and FC applications, demonstrating specific recognition of human EGF protein.

EGF is a versatile and essential growth factor that regulates various cellular processes, including cell proliferation, differentiation, and tissue repair. Its signaling through the EGFR is tightly controlled to ensure proper tissue development and maintenance.