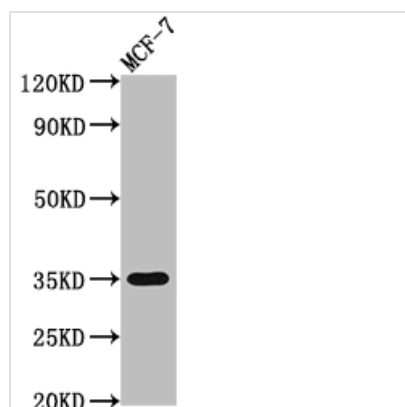




EPCAM Recombinant Monoclonal Antibody

| | |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Code | CSB-RA439934A0HU |
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | P16422 |
| Immunogen | A synthesized peptide derived from human EpCAM |
| Species Reactivity | Human |
| Tested Applications | ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200 |
| Relevance | May act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium for providing immunological barrier as a first line of defense against mucosal infection. Plays a role in embryonic stem cells proliferation and differentiation. Up-regulates the expression of FABP5, MYC and cyclins A and E. |
| 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 | Tags & Cell Markers |
| Gene Names | EPCAM |
| Clone No. | 6H12 |

Image



Western Blot

Positive WB detected in: MCF-7 whole cell lysate

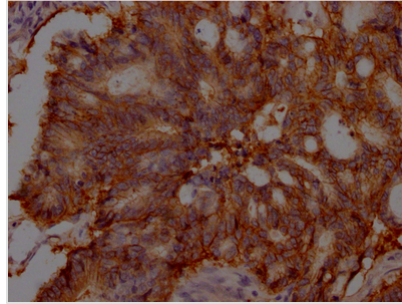
All lanes: EPCAM antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 35 kDa

Observed band size: 35 kDa



IHC image of CSB-RA439934A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica BondTM 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? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The EPCAM recombinant monoclonal antibody was prepared using protein technology and DNA recombinant technology. Initially, mice were immunized with a synthesized peptide derived from human EPCAM. After a certain period, the spleen of the mice was isolated under aseptic conditions, and the total RNA of spleen cells was extracted. cDNA synthesized by RNA reverse transcription was then used as the template for PCR amplification of the EPCAM antibody gene. The gene was introduced into a vector, which was then transfected into host cells for culture. The EPCAM recombinant monoclonal antibody was purified from the supernatant of cell culture by affinity chromatography. This antibody underwent rigorous verification and is suitable for use in detecting human EPCAM protein in ELISA, WB, and IHC experiments.

The EPCAM protein plays a role in cell adhesion, proliferation, and differentiation. It is primarily found on the surface of epithelial cells and maintains the integrity of the epithelial layer. EPCAM is also involved in signaling pathways that regulate cell proliferation and differentiation. Additionally, EPCAM has been shown to interact with proteins involved in cancer metastasis.