Product Information

Anti-EpCAM ICD antibody, Mouse monoclonal

Clone 4A7, purified from hybridoma cell culture

SAB4200473

Product Description

Anti-EpCAM ICD (mouse IgG1 isotype) is derived from the hybridoma 4A7 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to the intracellular domain of human EpCAM (GeneID: 4072), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents (Cat. No. ISO2). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Anti-EpCAM ICD recognizes the intracellular domain (ICD) of human and mouse EpCAM. The antibody can be used in several immunochemical techniques including immunoblotting (~ 40 kDa), immunoprecipitation and immunofluorescence.

Epithelial cell adhesion molecule (EpCAM) is an epithelial transmembrane glycoprotein, composed of an ectodomain, a transmembrane domain and a cytoplasmic domain. EpCAM is frequently expressed in human malignancies, normal stem and progenitor cells, and at lower levels, in normal epithelia. In vivo and in vitro studies have shown that its intracellular domain (ICD) fragment translocates to the nucleus after cleavage from EpCAM ectodomain and associates with other molecules to bind DNA resulting in cell proliferation and tumor formation.[1-4]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for research use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at -20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.25-0.5 µg/mL is recommended using whole extracts of human SW480 cells.

Immunofluorescence: a working concentration of 5-10 µg/mL is recommended using human MCF7 cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Maetzel, D., et al., *Nat. Cell Biol.*, **11**, 162-171 (2009).
2. Ralhan, R., et al., *BMC Cancer*, **10**, 331 (2010).
3. Carpenter, G., and Red Brewer, M., *Cancer Cell*, **15**, 165-166 (2009).
4. Went, P., et al., *Hum. Pathol.*, **35**, 122-128 (2004).

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