

Product Information

Anti-TM4SF4 antibody, Mouse monoclonal
clone TM4SF-11, hybridoma cell culture supernatant

Product Number **SAB4200706**

Product Description

Anti-TM4SF4 antibody, Mouse monoclonal (mouse IgM isotype) is derived from the TM4SF-11 hybridoma, produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mouse immunized with synthetic peptide from the internal region of human TM4SF4 (Gene ID 7104), conjugated to KLH. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Product Number ISO2. The antibody is the culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-TM4SF4 recognizes TM4SF4 from human, mouse, bovine, monkey, canine, and rat origin. The product may be used in several immunochemical techniques including Immunoblotting (~27 kDa). Detection of the TM4SF4 band by Immunoblotting is specifically inhibited by the immunogen.

TM4SF4 (Transmembrane 4 L6 Family member 4) also known as ILTMP (intestine and liver tetraspan membrane protein) is a member of the transmembrane 4 superfamily (or tetraspanin family). It is a cell surface glycoprotein containing four transmembrane domains which regulates the adhesive and proliferative status of epithelial cells and can mediate density-dependent cell proliferation. It was shown that TM4SF4 levels increased in non-dividing epithelial cells during their differentiation and migration out of intestinal crypts.¹

In addition, TM4SF4 levels are upregulated in 80% of hepatocellular carcinoma (HCC) tissues and in radiation-resistant lung adenocarcinoma cells.²⁻³ Reduction of TM4SF4 expression in HCC cell lines by stably transfecting TM4SF4 antisense plasmid caused significant inhibition of cell proliferation.² Moreover, Anti-TM4SF4 antibody treatment of TM4SF4-overexpressing lung carcinoma cells suppressed xenograft tumor growth in implanted mice, suggesting that TM4SF4 is a promising target in lung cancer therapy.³

Reagent

The product is supplied as a culture supernatant solution containing 15 mM sodium azide as a preservative. The product contains bovine serum albumin and a human-derived protein.

Precautions and Disclaimer

This product is for R&D 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 in working aliquots. Repeated freezing and thawing 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 dilution of 1:4,000–1:8,000 is recommended using whole extract of HCT-116 cells.

Note: In order to obtain best results in different techniques and preparations, it is recommended to determine optimal working concentration by titration test.

References

1. Wice, B.M., and Gordon, J.I., *J. Biol. Chem.*, **270**, 21907-18 (1995).
2. Li, Y. et al., *Acta Biochim. Biophys. Sin. (Shanghai)*, **44**, 224-32 (2012).
3. Choi, S.I. et al., *Oncotarget*, **5**, 9823–37 (2014).

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