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Product Information

Monoclonal Anti-TOM1L1, **clone 3F12**
produced in mouse, purified from hybridoma cell culture

Product Number **SAB4200652**

Product Description

Monoclonal Anti-TOM1L1 (mouse IgG1 isotype) is derived from the hybridoma 3F12 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a TOM1L1 fusion protein. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-TOM1L1 recognizes human, bovine and monkey TOM1L1. The product may be used in several immunochemical techniques including immunoblotting (~53 kDa) and immunofluorescence.

TOM1L1 (Target Of Myb1 (chicken)-Like 1), also known as SRCASM (Src-activating and signaling molecule) or OK/KNS-CL, consists of an N-terminal VHS (Vps27-Hrs-STAM) domain followed by downstream GAT (GGA and Tom1) domain.[1-2]
Tom1L1 is predominantly detected in the cytosol. Growth factor-induced Tyrosine-phosphorylation can result in Tom1L1 recruitment to the plasma membrane. Tom1L1 interacts with clathrin and ubiquitinated proteins. This suggests Tom1L1 has a role, along with Hrs/STAMs, in generating an endosomal sorting complex. This complex is required for transport and sorting of ubiquitinated proteins by the multivesicular bodies pathway.[1-2] Tom1L1 interacts with clathrin heavy chain (CHC) in a structural component of clathrin-coated vesicles. The Tom1L1-CHC complex negatively regulates mitogenic and transforming signals. When not associated with CHC, Tom1L1 relocates in to caveolae and promotes Src-driven DNA synthesis probably through interactions with Grb2 and p85 subunit of PI3K.[1-3] TOM1L1 was recently found coamplified with HER2 in human breast cancer .[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 R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

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 0.5-1 µg/mL is recommended using whole extracts of HeLa cells.

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

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

References

1. Wang, T., et al., *Traffic*, **11**, 1119-1128 (2010).
2. Liu, N.S., et al., *EMBO J.*, **28**, 3485-3499 (2009).
3. Guillaume, C., et al., *Mol. Cell. Biol.*, **27**, 7631–7640 (2007).
4. Orsetti, B., et al., *Cancer Res.,* **64**, 6453-6460 (2004).

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