

Product Information

Monoclonal Anti-EXOC7, clone 70X13F3
produced in mouse, purified immunoglobulin

Catalog Number **SAB4200604**

Product Description

Monoclonal Anti-EXOC7 (mouse IgG2b isotype) is derived from the hybridoma 70X13F3 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a recombinant full-length EXOC7 subunit (Gene ID: 64632). 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-EXOC7 recognizes human, monkey, chicken, dog, hamster, rat and mouse EXOC7. The product may be used in several immunochemical techniques including immunoblotting (~ 70kDa), immunocytochemistry and flow cytometry.

Exocytosis is an essential membrane traffic event mediating the secretion of intracellular protein contents such as hormones and neurotransmitters as well as the incorporation of membrane proteins and lipids to specific domains of the plasma membrane. It is crucial for cell growth, cell-cell communication, and cell polarity establishment. For most eukaryotic cells, exocytosis is polarized. A multiprotein complex, named the exocyst, is required for polarized exocytosis from yeast to mammals. The exocyst consists of eight components: Sec3, Sec5, Sec6, Sec8, Sec10, Sec15, Exo70, and Exo84. They are localized to sites of active exocytosis, where they mediate the targeting and tethering of post-Golgi secretory vesicles for subsequent membrane fusion.¹ A member of this family, EXOC7, also named Exo70 is required for assembly of the exocyst complex and docking of the complex to the plasma membrane.² Its stimulatory effect on the Arp2/3 complex is required for lamellipodia formation and maintaining directional persistence of cell migration.³ In addition, EXOC7 was found to be involved in caveolin-1 recycling to the plasma membrane during re-adhesion of the cells to the substratum.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 1-2 $\mu\text{g/mL}$ is recommended using PC12 total cell extracts.

Immunofluorescence: a working concentration of 5-10 $\mu\text{g/mL}$ is recommended using PC12 cells.

Flow Cytometry: a working dilution of 2-5 μg /test 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.

References

1. Hsu, S.C., et al., *Int. Rev. Cytol.*, **233**, 243-265 (2004).
2. Liu, J., et al., *Mol. Biol. Cell.*, **18**, 4483-4492 (2007).
3. Liu, J., et al., *Curr. Biol.*, **22**, 1510-1515 (2012).
4. Hertzog, M., et al., *PLoS One*, **7**, e52627 (2012).

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