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Product Information

Monoclonal Anti-PTPA/ PPP2R4, clone 5G3
produced in mouse, purified immunoglobulin

Catalog Number **SAB4200265**

Product Description

Monoclonal Anti-PTPA/ PPP2R4 (mouse IgG2a isotype) is derived from the hybridoma 5G3 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a recombinant mouse PPP2R4 (GeneID: 5524) 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-PTPA/ PPP2R4 recognizes mouse and human PTPA/ PPP2R4. The antibody may be used in several immunochemical techniques including immunoblotting (38 kDa).

Protein phosphatase 2A is one of the four major Ser/Thr phosphatases and is implicated in the negative control of cell growth and division. Protein phosphatase 2A holoenzymes are heterotrimeric proteins composed of a structural subunit A, a catalytic subunit C, and a regulatory subunit B. The regulatory subunit is encoded by a diverse set of genes that have been grouped into the B/PR55, B'/PR61, and B"/PR72 families. These different regulatory subunits confer distinct enzymatic specificities and intracellular localizations to the holozenzyme. Phosphotyrosyl phosphatase activator (PTPA), also known as protein phosphatase 2A activator, regulatory subunit 4 (PPP2R4), is a conserved protein from yeast to human. PTPA belongs to the B' family, and encodes a specific phosphotyrosyl phosphatase activator of the dimeric form of protein phosphatase 2A. PTPA is required for the biogenesis of active and specific PP2A. Alternative splicing results in multiple transcript variants encoding different isoforms.[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 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 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 0.5-1.0 µg/mL is recommended using whole extracts of mouse 3T3 or human 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. Fellner, T., et al., *Genes Dev.*, **17**, 2138-2150 (2003).
2. Leulliot, N., et al., *Mol. Cell*, **23**, 413-424 (2006).
3. Magnusdottir, A., et al., *J. Biol. Chem.*, **281**, 22434-22438 (2006).
4. Jordens, J., et al., *J. Biol. Chem*., **281**, 6349-6357 (2006).

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