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ProductInformation

Anti-PMCA3
Developed in Rabbit
Affinity Isolated Antibody

Product Number **P 1369**
Storage Temperature –20 °C

Product Description

Anti-PMCA3 (plasma membrane calcium ATPase 3) is developed in rabbit using a highly purified peptide ANSSIEFHPKPQQQREVP, corresponding to amino acid residues 5-22 of the rat PMCA3 protein. This sequence is identical in human. The antibody was affinity isolated on immobilized immunogen.

Monoclonal Anti-PMCA3 recognizes PMCA3 from rat tissue. This antibody is specific to PMCA3 but reacts with both PMCA3a (127 kDa) and PMCA3b splice variants. This antibody detects PMCA3 by immunoblotting.

The Ca^{2+} pump of the plasma membrane, termed plasma membrane calcium ATPase (PMCA), pumps Ca^{2+} from the cytosol to the extracellular space. This integral membrane protein is conserved throughout evolution and related to a number of other ATPases including the sarcoplasmic reticulum calcium ATPase (SERCA) and the Na^{+}/K^{+} ATPase. These membrane proteins are characterized by a large intracellular catalytic domain and a smaller C-terminal domain that serves to regulate the activity of the pump.[1]

Studies indicate that there are 20 known isoforms of the PMCA, encoded by a four-member gene family.[2]

Reagent

Monoclonal Anti-PMCA is supplied as 100 µg of affinity isolated antibody at 1 mg/ml in phosphate buffered saline containing 1 mg/ml bovine serum albumin and 0.05 % sodium azide.

Precautions and Disclaimer

Due to the sodium azide content, a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling procedures.

Storage/Stability

Store at –20 °C. For extended storage, freeze in working aliquots. Repeated freezing and thawing is not recommended. 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 in not used within 12 hours.

Product Profile

The recommended dilution is 1 to 1000 for immunoblotting.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working conditions by titration test.

References

1. Carafoli, E., Basic Res. Cardiol., 92, 59-61 (1997).
2. Stauffer, T.P. et al., J. Biol. Chem., 270, 12184-12190 (1995).

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