



Product Information

MONOCLONAL ANTI-SPECTRIN (α & β)

Clone SB-SP2

Mouse Ascites Fluid

Product No. **S 9645**

Product Description

Monoclonal anti-Spectrin (α & β) (mouse IgM isotype) is produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Purified human erythroid spectrin was used as the immunogen. The isotype is determined by a double diffusion assay using immunoglobulin and subclass specific antisera.

Monoclonal anti-Spectrin (α & β) localizes the 220 and 240 kDa bands of spectrin from human erythrocytes utilizing an immunoblotting technique. By immunofluorescence the antibody will stain human and chicken spectrin in erythrocyte smears.

Spectrin is a major constituent of the erythrocyte skeleton accounting for 25% of the total membrane protein and 75% of the cytoskeletal mass. It is associated with the cytoplasmic surface of the membrane by attachment to ankyrin, a peripheral membrane protein. The membrane skeleton influences several cellular properties such as cell shape, restriction of mobility of the integral membrane protein exposed at the cell surface and transmembrane movement of phospholipids and cholesterol. On SDS-PAGE gels erythrocyte spectrin appears as two bands referred to as α (240kDa) and β (220kDa). While the simplest form of spectrin in solution is an α - β heterodimer, spectrin can undergo self-association in various conditions to form a tetramer of α_2 - β_2 . In recent years a large number of spectrin-like molecules have been found in non-erythroid cells. These proteins are known by such different names as fodrin, CBP I, calspectin and TW 260/240.

Reagents

The product is provided as ascites fluid containing 0.1% sodium azide as a preservative.

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 practices

Product Profile

A minimum working dilution of 1:100 was determined by an immunoblot using an extract of human erythrocyte ghosts or purified human erythrocyte spectrin and immunoperoxidase labeling.

In order to obtain best results it is recommended that each individual user determine optimum working dilution by a titration assay.

Uses

Monoclonal anti-Spectrin may be used in the study of the erythrocyte membrane skeleton and its abnormalities such as spectrin deficiency in hereditary spherocytosis.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

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