

## Product Information

### MONOCLONAL ANTI-CHONDROITIN SULFATE CLONE CS-56

#### Mouse Ascites Fluid

Product No. **C8035**

#### Product Description

Monoclonal Anti-Chondroitin Sulfate (mouse IgM isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Ventral membranes of chicken gizzard fibroblasts were used as the immunogen. The isotype is determined using Sigma ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

Monoclonal Anti-Chondroitin Sulfate is immunospecific for chondroitin sulfate containing proteoglycans as determined by indirect immunofluorescent labeling. The product reacts best in bovine mammary gland epithelial (BMGE) cells. Good labeling may also be obtained with human, chicken and mouse fibroblasts or tissues.<sup>1,2</sup>

Monoclonal Anti-Chondroitin Sulfate can be used to study chondroitin sulfate proteoglycan (CSPG) distribution and its relationships to specific cell-substrate contacts.

Many cellular activities depend on the interaction of cells with the surrounding extracellular matrix (ECM). Most cells, in intact tissue and in culture, are attached to an ECM. Epithelial cells are associated with the basement membrane; fibroblastic cells are usually embedded in a pericellular mesh of fibrils, and tissue culture cells usually grow on a substrate which is covered by various ECM components. Studies have indicated that the matrix or its various isolated components provide not only adhesive surfaces for cells to grow on but also have effects on the rate of cell growth, mobility, morphogenesis and differentiation. Within the ECM several glycoproteins and proteoglycans have been identified. It has been proposed that the different constituents interact with

each other in a rather complex fashion. The poor antigenicity of proteoglycans especially their glycoaminoglycan (GAG) moieties make it difficult to localize these molecules in tissue and cell culture.

#### Reagents

The product is provided as ascites fluid with 15mM sodium azide as a preservative.

#### Precautions

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 1:200 is determined by indirect immunofluorescent labeling of BMGE cells using FITC Goat Anti-Mouse IgG (Fab specific) (Product No. F5262) as the secondary antibody.

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

#### Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen 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.

#### References

1. Avnur, Z., and Geiger, B., *Cell*, **38**, 811 (1984).
2. Sobue, M., et al., *Stain Tech.*, **64**, 43 (1989).

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