

ProductInformation

MONOCLONAL ANTI-GELSOLIN CLONE GS-2C4 Mouse Ascites Fluid

Product No. **G4896**

Monoclonal Anti-Gelsolin (mouse IgG1 isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes of an immunized mouse. Human plasma gelsolin was used as the immunogen. This clone has also been referred to as 2C4 or 2C4c10G2. The isotype is determined using Sigma ImmunoType™ Kit (Sigma Stock No. ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Sigma Stock No. ISO-2). The product is provided as ascites fluid containing 15mM sodium azide (see MSDS)* as a preservative.

Specificity

Monoclonal Anti-Gelsolin reacts specifically with human plasma and cytoplasmic gelsolin in immunoblotting. The antibody cross-reacts with rabbit, pig, and bovine gelsolins, but does not react with rat gelsolin. The antibody is directed against an epitope located on the 47 kD peptide derived from a chymotryptic cleavage of gelsolin. This peptide contains the carboxy terminal actin binding site for gelsolin.

Description

Gelsolin is a calcium dependent actin binding protein. It is a potent modulator of actin filament length and gelation. Gelsolin has been shown to exist in at least two variant forms, cytoplasmic gelsolin and plasma gelsolin. Plasma gelsolin has also been called actin depolymerizing factor (ADF) or brevin. Human plasma and rabbit macrophage gelsolins differ by the presence of a 25 amino acid residue extension at the NH₂ terminus in the human plasma gelsolin which appears to account for the difference in relative molecular weights.

Working Dilution

A minimum working dilution of 1:1000 is determined with total human plasma extract in an immunoblot technique using overnight transfer and immunoperoxidase staining.

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

Uses

Monoclonal Anti-Gelsolin may be used in ELISA, immunoblotting, and immunofluorescent staining of frozen sections for detection of gelsolin-actin complexes. This antibody has also been used in immunoaffinity chromatography for purification of gelsolin and for detection of gelsolin-actin complexes in cell extracts.

Storage

For continuous use, store 2-8EC for up to one month. For extended storage, 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 by centrifugation before use.

*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.

5/98

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