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Purification of a murine IgM monoclonal antibody

(2009) *Hybridoma*, 28 (3), pp. 189-197.

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Abstract

An IgM monoclonal antibody, S11-23.4, raised against the 47-62 amino acid sequence in bovine prothrombin fragment 1 (F-1, the amino-terminal 156 residues of prothrombin), was purified from tissue culture supernatants and ascites using different purification schemes to determine the best method. There are many different purification schemes for the purification of IgG antibodies, which are generally easier to purify than IgM antibodies. Several different methods and schemes were tried to purify S11-23.4, and it was determined that the best purification schemes are ion exchange chromatography for cell culture IgM antibodies, and a G-100 gel filtration column, in conjunction with precipitation, reduction, and alkylation, for the same IgM antibody in ascites. © 2009, Mary Ann Liebert, Inc.

ISSN: 15540014