B-122 AND ALF-161 - HAMSTER IGG MONOCLONAL ANTIBODIES AGAINST MOUSE/RAT IL-1 BETA AND MOUSE IL-1 ALPHA

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Information on antibodies against IL-1 beta:

The role of murine IL-1 beta in vitro and in vivo has not been defined. We describe here the production of neutralizing and immunoprecipitating mAb and polyclonal antibodies specific for murine IL-1 beta and their application to a characterization of the murine IL-1 beta protein. Immunization of either hamsters or rabbits with the recombinant mature form of murine IL-1 beta emulsified in CFA elicited antisera and hamster mAb that only recognized denatured IL-1 beta. In contrast, immunization with rIL-1 beta adsorbed to alum resulted in the generation of neutralizing and immunoprecipitating rabbit and hamster antisera and hamster mAb. All of the mAb recognize both the pro-form of IL-1 beta and the mature bioactive form produced by cultures of murine peritoneal macrophages. Using these antibodies, we demonstrate that approximately half of the IL-1 activity present in supernatants of LPS-treated cultured mouse macrophages is composed of IL-1 beta. Additionally, IL-1 beta as well as IL-1 alpha can be detected in the plasma of LPS-treated mice. These studies, therefore, demonstrate the production of IL-1 beta both in vitro and in vivo.

Publication: Generation of monoclonal antibodies to murine IL-1 beta and demonstration of IL-1 in vivo