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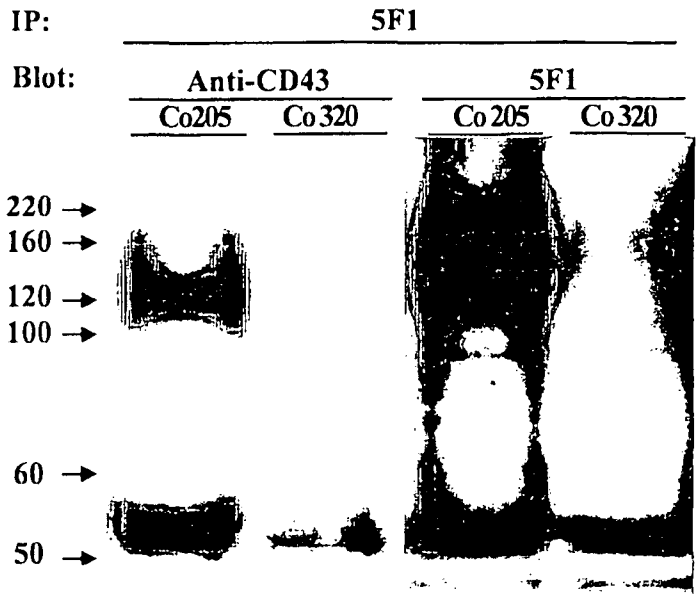
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(54) **Title:** ANTIBODIES RECOGNIZING A CARBOHYDRATE CONTAINING EPITOPE ON CD-43 AND CEA EXPRESSED ON CANCER CELLS AND METHODS USING SAME



(57) **Abstract:** The present invention provides novel antibodies specifically bind to an epitope on CD43 and CEA expressed on nonhematopoietic cancer cells, but do not specifically bind to a CD43 expressed by a leukocyte or by a Jurkat cell, and is capable of inducing apoptosis of the nonhematopoietic cancer cell after binding to the epitope on cell surface of the nonhematopoietic cancer cell in the absence of cytotoxin conjugation and immune effector function, wherein the epitope comprises a carbohydrate structure and the binding of the antibody to the epitope is inhibited by a carbohydrate comprising a Le^a structure, a Le^a-lactose structure, a LNDFH II structure, or a LNT structure. In addition, the present invention also provides use of the antibodies described herein for diagnostic and therapeutic purposes.

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