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(54) Title: ANTIGEN BINDING MOLECULES AND METHODS THEREOF II

(57) Abstract: The invention relates to antigen-binding molecules that specifically bind to MHC Class I DLA-12 antigen. In one embodiment, the antigen-binding molecule is an antibody that specifically binds to canine MHC Class I DLA-12 antigen. Chimeric molecules of the antibody conjugated to another heterologous moiety are also provided. In one embodiment, the heterologous moiety is monomethyl auristatin E (MMAE). A method of inhibiting cancer using the antibody or the chimeric molecule thereof is also provided. In another embodiment, the antibody-MMAE conjugate suppresses tumour development in a murine model of B cell lymphoma.

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