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(54) Title: HUMAN ANTIBODIES THAT BIND CXCR4 AND USES THEREOF

(57) Abstract: The present disclosure provides isolated monoclonal antibodies that specifically bind to CXCR4 with high affinity, particularly human monoclonal antibodies. Nucleic acid molecules encoding the antibodies of this disclosure, expression vectors, host cells and methods for expressing the antibodies of this disclosure are also provided. Immunoconjugates, bispecific molecules and pharmaceutical compositions comprising the antibodies of this disclosure are also provided. This disclosure also provides methods for detecting CXCR4, as well as methods for treating various cancers, inflammatory disorders and HIV infection using an anti-CXCR4 antibody of this disclosure.