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(54) Title: THERAPEUTIC CD47 ANTIBODIES

(57) Abstract: Provided are monoclonal antibodies and antigen-binding fragments thereof that bind to, and inhibit the activity of, CD47, as well as monoclonal antibodies and antigen binding fragments thereof that compete with the former for binding to CD47. Also provided are combinations of any of the foregoing. Such antibody compounds are variously effective in 1) treating tissue ischemia and ischemia-reperfusion injury (IRI) in the setting of organ preservation and transplantation, pulmonary hypertension, sickle cell disease, myocardial infarction, stroke, and other instances of surgery and/or trauma in which IRI is a component of patho - genesis; 2) in treating autoimmune and inflammatory diseases; and 3) as anti-cancer agents that are toxic to susceptible cancer cells, promoting (increasing) their phagocytic uptake and clearance, and/or directly killing such cells.

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