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(71) Applicant: **REGENERON PHARMACEUTICALS, INC.** [US/SA]; 777 Old Saw Mill River Road, Tarrytown, NY 10591 (US).

(72) Inventors: **MURPHY, Andrew, J.**; 10 Newton Court, Croton-on-Hudson, NY 10520 (US). **KOSTIC, Ana**; 444 Manhattan Avenue, Apt. 6E, New York, NY 10026 (US).

(74) Agents: **TERMES, Lance** et al.; Alston & Bird LLP, Bank of America Plaza, 101 South Tryon Street, Suite 4000, Charlotte, NC 28280-4000 (US).

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(54) Title: ANTI-HLA-B*27 ANTIBODIES AND USES THEREOF

(57) Abstract: The present invention provides antibodies and antigen-binding fragments thereof that specifically bind HLA-B*27 (also called HLA-B27). In certain embodiments, the antibodies of the invention bind soluble and/or cell surface-expressed forms of HLA-B*27. The antibodies of the present invention, in certain embodiments, inhibit HLA-B*27-mediated activation of T cells. Certain exemplary antibodies of the present invention exhibit enhanced binding to HLA-B*27 as compared to other HLA-B allelic variants (e.g., HLA-B*07). The present invention also provides anti-HLA-B*27 antibodies with pH-dependent binding characteristics (e.g., higher affinity binding at neutral pH than at acidic pH). The antibodies of the invention are useful for the treatment of diseases and disorders associated with HLA-B*27 expression, including ankylosing spondylitis and other spondyloarthropathies.

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