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(54) Title: ANTIGEN-BINDING PROTEINS THAT ANTAGONIZE LEPTIN RECEPTOR

(57) Abstract: The present invention provides antibodies and antigen-binding fragments of antibodies that bind to leptin receptor (LEPR), and methods of using the same. According to certain embodiments, the invention includes antibodies and antigen-binding fragments of antibodies that bind LEPR and antagonize LEPR signaling. In certain embodiments, the invention includes antibodies and antigen-binding fragments of antibodies that bind LEPR in the presence or absence of leptin. In other embodiments, the invention includes antibodies and antigen-binding fragments of antibodies that exhibit partial agonism of LEPR signaling. The antibodies and antigen-binding fragments of the present invention are useful for the treatment of various conditions, including but not limited to congestive heart failure cachexia, pulmonary cachexia and cancer cachexia, autoimmune disorders such as inflammatory bowel disease, lupus erythematosus, multiple sclerosis, psoriasis, cardiovascular diseases, elevated blood pressure, neurodegenerative disorders, depression, cancer such as hepatocellular carcinoma, melanoma, breast cancer, and other diseases and disorders associated with or caused by elevated leptin signaling.

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