Docket #: S16-098

Monoclonal antibody to CD6, Clone 34-3

Researchers at Stanford have created a monoclonal antibody to CD6. CD6 is a surface molecule expressed on T cells and some B cells. It may also play a role in diseases such as multiple sclerosis and rheumatoid arthritis. The precise function of CD6 in regulating T cell responses and in disease pathogenesis is still unclear. CD6 may also be used to identify regulatory T cells (Tregs) based on their low/negative CD6 expression. To further study the role of CD6, the inventors have developed this rat anti-mouse CD6 monoclonal antibody, IgG2b isotype. It can be used as a research tool to study CD6.

Stage of research
The antibody has been used to characterize CD6 expression in the mouse and investigate the role of CD6 in T cell development and function.

Applications

- Research tool
    - Phenotypic analysis
    - Cell sorting
    - Depletion of T cells and CD5 -positive B cells in mice
- ELISA
- Flow Cytometry

Advantages

- Well characterized
- In vivo administration results in sustained down regulation of CD6 off the surface of T cells

- Potential for development into a therapeutic antibody for autoimmunity or conditioning for hematopoietic cell transplantation

Publications

- "Additional reference for CD6 reference" Li Y, Singer NG, Whitbred J, Bowen MA, Fox DA, Lin F. CD6 as a potential target for treating multiple sclerosis. Proc Natl Acad Sci U S A. 2017 Mar 7;114(10):2687-2692

Innovators

- Susan Prohaska
- Jane Parnes

Licensing Contact

Michael Bellas

Licensing Associate

Email