Monoclonal Neutralizing Antibodies Specific for Canine TNF Alpha

Tech ID: 34004 / UC Case 2021-664-0

ABSTRACT

Researchers at the University of California, Davis have developed monoclonal antibodies engineered for the treatment and detection of autoimmune disorders and cancers in dogs.

FULL DESCRIPTION

Researchers at the University of California Davis have developed a technology that refers to the creation of mouse monoclonal antibodies specific for canine TNF alpha. These antibodies are designed not only to identify canine TNF alpha for research purposes but also to be used for therapeutic applications in dogs. By incorporating the variable part of these antibodies with a canine constant antibody region, and caninizing the framework regions of the variable part, these antibodies can be utilized with minimal anti-self reaction in dogs for therapeutic purposes.

APPLICATIONS

- Veterinary medicine
- Research in canine autoimmune disorders and cancers
- Potential in the development of canine-specific therapeutic drugs

FEATURES/BENEFITS

- Possibility of detection and treatment of autoimmune disorders and cancers in dogs
- Reduced chances of causing anti-self reaction
- Greater efficacy with fewer side effects compared to NSAIDS and steroids
- Addresses lack of specific treatment for autoimmune disorders and cancers in dogs
- Addresses adverse effects and limited efficacy of existing treatments

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OTHER INFORMATION

KEYWORDS

autoimmune disorders, cancers in dogs, canine TNF alpha, detection, monoclonal antibodies, canine therapeutic applications

CATEGORIZED AS

- **Agriculture & Animal Science**
  - Animal Science
- **Biotechnology**
  - Health
- **Veterinary**
  - Companion Animal
  - Therapeutics

RELATED CASES

2021-664-0

ADDITIONAL TECHNOLOGIES BY THESE INVENTORS

- JC071c2, a Caninized Monoclonal Antibody Mutant Specific for Canine PDL1 That Could Avoid Potential Nglycosylation and W Oxidation
- Monoclonal Antibodies Specific to Canine PD-1 and PD-L1
- Monoclonal Antibodies: CCR4 Antibody for Treating Canine Lymphoma and c-KIT Monoclonal Antibodies for Detecting and Treating Canine Mast Cell Tumors
- Monoclonal Antibodies Specific For Canine C-Kit
- Jc071c, a Caninized Monoclonal Antibody Specific for Canine Pd-L1
- JC071c1, a Caninized Monoclonal Antibody Mutant Specific for Canine PDL1 That Could Avoid Potential Nglycosylation and N-deamidation within CDR Sequences
- JC071ch, a Chimeric Monoclonal Antibody Specific for Canine PDL1
- JC071c4, a Caninized Monoclonal Antibody Mutant Specific for Canine PDL1 That Could Avoid Potential Nglycosylation within Light Chain CDR1

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