ArthritoMab™ Arthritis Inducing Antibody Cocktail
for use in anti-collagen antibody induced arthritis

Catalog Number CIA-MAB-50

INTRODUCTION

A cocktail of 4 monoclonal antibodies for the induction of arthritis as an alternative to the widely used collagen-induced arthritis (CIA) model.

REAGENTS PROVIDED

Arthritogenic Monoclonal Antibody cocktail, Concentration 10 mg/mL
Lyophilized LPS from E.coli 055:B5, 2.5 mg

MATERIALS NEEDED
Mice DBA/1, Balb/c or any other strains.
- approximately 8 - 10 weeks of age
- approximate weight: 20 g

LPS PREPARATION

- Reconstitute 2.5 mg LPS with 0.5 mL of sterile PBS in a sterile hood. This gives a 5 mg/mL solution.
- Vortex briefly and check all the LPS is in solution. Re-vortex if required.
- Transfer the reconstituted LPS to a sterile glass container, plastic is not recommended, containing 4 mL of sterile PBS.
- Wash out the LPS vial with 0.5 mL of sterile PBS, adding this to the glass container to give 5 mL of 0.5 mg/mL LPS.
- 200 μL of this solution gives 100 μg of LPS.

DISEASE INDUCTION

Day 0: Administer 2 mg (200 μL) mAb cocktail intravenously (iv). This can vary with mouse strain and laboratory and should be optimized accordingly. Typically 2-8 mg per animal iv is recommended. Intraperitoneal (ip) administration can also be used.

Day 3: Administer 100 μg (200 μL) LPS ip. This can vary with mouse strain and laboratory and should be optimised accordingly. Typically 50-100 μg on day 3-6 is recommended.

Observe arthritis score and paw thickness throughout the study. Initial symptoms of arthritis typically appear on Day 2, but will increase in appearance after LPS boost.

STORAGE

Keep at -20 ºC, avoid freeze-thaw cycles.

NOTES

Variations may occur from lab to lab and the protocol may need to be optimized at specific labs or for specific strains used. Items for consideration include the housing environment, water and feed since exposure to environmental LPS can result in a level of LPS tolerance which may reduce arthritis severity.

REFERENCE