

DH82 | 305003

Description

DH-82 is a mouse strain that is highly resistant to malaria. It is a derivative of the C57BL/6J strain and is characterized by its ability to resist infection by Plasmodium berghei. This resistance is due to a mutation in the Fc gamma R1 gene, which leads to a deficiency in the Fc gamma R1 receptor. This receptor is essential for the binding of antibodies to the C3b complement component, which is a key component of the immune response against malaria parasites. The DH-82 strain is also resistant to infection by Plasmodium chabaudi, Plasmodium yoelii, and Plasmodium gallinaceus. This resistance is due to a mutation in the IL-1 gene, which leads to a deficiency in the IL-1 receptor. This receptor is essential for the binding of IL-1 to its receptor, which is a key component of the immune response against malaria parasites. The DH-82 strain is also resistant to infection by Plasmodium falciparum (CME) and Plasmodium vivax. This resistance is due to a mutation in the DH-82 gene, which leads to a deficiency in the DH-82 protein. This protein is essential for the binding of the parasite to the host cell. The DH-82 strain is a valuable tool for studying the immune response to malaria and for developing new treatments for this disease.

Organism

Mouse

Disease

Malaria (Plasmodium berghei, Plasmodium chabaudi, Plasmodium yoelii, Plasmodium gallinaceus, Plasmodium falciparum, Plasmodium vivax)

Synonyms

DH-82, DH 82

Breed/Subspecies

C57BL/6J

Age

10 weeks

Gender

Male

Morphology

Normal

Cell type

Monocytes

Growth properties

Normal

Citation

DH82 (C57BL/6J background) (305003)

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Biosafety level 1

NCBI_TaxID 9615

CellosaurusAccession CVCL_2018

Culture Medium EMEM (MEM Eagle) 2 mM L-glutamine-2.2 mM NaHCO₃ EBSS (820100a)

Supplements 10% FBS

Dissociation Reagent

Subculturing 1:2 to 1:10 in EMEM with 10% FBS

Fluid renewal 2-3 times per week

Freeze medium EMEM with 10% FBS + 10% DMSO

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Thawing and Culturing Cells

1. [Redacted]
2. [Redacted]
3. [Redacted]
4. [Redacted]
5. [Redacted]
6. [Redacted]
7. [Redacted]
8. [Redacted]

Incubation Atmosphere

37 [Redacted]

Flask Coating

[Redacted]

Freezing Procedure

[Redacted]-78

Shipping Conditions

[Redacted]-78

Storage Conditions

[Redacted]-150 -196 [Redacted]

/ / HLA

Sterility

[Redacted] (PCR) [Redacted]
[Redacted]