



NYU



Leydig-cell specific MTP deficient mice

These Leydig-specific MTP-deficient mice can be used to study the role of microsomal triglyceride transfer protein (MTTP) in the testes, and sex hormone production.

The Leydig-specific MTTP (microsomal triglyceride transfer protein) deficient mice are valuable for studying lipid metabolism, steroidogenesis, and reproductive biology. MTTP is crucial for the assembly and secretion of lipoproteins, which transport essential lipids such as triglycerides and cholesterol. By creating Leydig-specific MTTP-deficient mice, researchers can investigate how the absence of MTTP affects lipid handling within Leydig cells, providing insights into the specific lipid metabolic pathways active in these cells. This model allows for a deeper understanding of how disruptions in lipid transport and metabolism impact steroid hormone production, particularly testosterone, and overall male reproductive function. Additionally, examining the effects of MTTP deficiency in Leydig cells enables researchers to explore the broader physiological roles of MTTP in different tissues and cell types, potentially identifying critical mechanisms that influence male fertility and endocrine regulation.

Technology ID

HUS02-15

Category

Life Sciences/Materials/Mouse Models

Olivia Zelony

Authors

Mahmood Hussain

View online page

