

sRAGE Mouse

Advanced Glycosylation End Product-Specific Receptor Mouse Recombinant

RCP2236

Product Overview

Name	sRAGE Mouse
Description	Advanced Glycosylation End Product-Specific Receptor Mouse Recombinant

Background

The soluble receptor for advanced glycation end products, sRAGE, is a multifunctional protein known for its involvement in diverse physiological processes, including inflammation, aging, and chronic diseases. Research using mouse models has been instrumental in unraveling the complexities of sRAGE biology and its implications for health and disease. This study aims to provide a comprehensive exploration of sRAGE in mouse physiology, shedding light on its various functions and potential applications in understanding aging and disease mechanisms. The primary objective of this research is to elucidate the impact of sRAGE in mouse models on aging processes. In vivo experiments utilizing genetically modified mice with altered sRAGE expression will be conducted to investigate how sRAGE influences the aging process, including effects on tissue homeostasis, oxidative stress, and longevity. Understanding these mechanisms is fundamental for deciphering the role of sRAGE in age-related diseases. The second objective is to assess the clinical relevance of sRAGE in mouse models of chronic diseases. Mouse models of diseases such as diabetes, Alzheimer's disease, and cancer will be employed to explore how sRAGE modulation affects disease progression, inflammation, and tissue damage. These investigations may provide valuable insights into potential therapeutic strategies targeting sRAGE in various chronic diseases. The third objective is to explore the broader implications of sRAGE in mouse physiology, including its effects on immunity, tissue repair, and metabolic regulation. Research will investigate its roles in immune cell function, wound healing, and glucose homeostasis. Understanding the multifaceted properties of sRAGE in mouse models may open new avenues for therapeutic interventions in various health and disease contexts. By delving into the diverse functions of sRAGE in mouse physiology, this research aims to expand our knowledge of its physiological roles and clinical applications. The findings may contribute to the development of targeted interventions for age-related diseases and chronic conditions influenced by sRAGE.