

s100bb Bovine

s100bb Bovine homodimer

RCP1979

Product Overview

Name	s100bb Bovine
Description	s100bb Bovine homodimer

Background

S100BB, a member of the S100 family of proteins, is a calcium-binding protein that plays a significant role in various cellular processes, particularly in the central nervous system (CNS). Initially identified as a brain-specific protein, S100BB has captured the attention of researchers due to its involvement in neurological signaling, brain development, and its potential implications in neurological disorders. This research delves into the enigmatic world of S100BB, aiming to uncover its diverse functions, regulatory mechanisms, and its relevance in health and disease. **Discovery and Structural Insights:** S100BB was first discovered in the brain, primarily localized in astrocytes, a type of glial cell in the CNS. Structurally, S100BB is characterized by its EF-hand motifs, allowing it to bind calcium ions, a property crucial for its function. These calcium-binding abilities enable S100BB to participate in intricate cellular signaling pathways, making it a vital player in the dynamic communication within the CNS. **Neurological Signaling and Plasticity:** Within the CNS, S100BB has been implicated in neuronal signaling and synaptic plasticity. It interacts with several target proteins, modulating their activities and influencing processes like neurotransmitter release and neuronal differentiation. Furthermore, S100BB participates in the regulation of intracellular calcium levels, a key factor in neuronal excitability and synaptic transmission. Understanding these roles is vital for unraveling the complexities of neurological function and plasticity.