



SCHIZOPHRENIA Factsheet

December 2019

What is S100 proteins?

S100 proteins are a subgroup of proteins which regulate intracellular processes such as cell growth and motility, cell cycle regulation, transcription and differentiation. They are characterised by two calcium binding sites of the helix-loop-helix conformation, and at least 21 members have been identified so far. S100B is one member of this subgroup that is primarily found in the cytoplasm of astrocytes. It regulates cell shape, energy metabolism, and intracellular signal transduction¹. Serum S100B has been used as a marker for CNS damage, particularly in astrocytes, as well as a marker of blood-brain-barrier disruption. Evidence has also implicated S100B as a potential susceptibility gene in schizophrenia.

What is the evidence for S100 proteins?

Moderate to high quality evidence found a large increase in S100B protein levels in serum of people with schizophrenia compared to people without schizophrenia.

For more information see the technical table



NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at neura.edu.au/donate/schizophrenia.