

**CATALOGUE #:** 8S9h

**PRODUCT NAME:** S100BB homodimer and S100A1B heterodimer, human

**Source:** Human brain tissue.

Blood samples from tissue donors were tested and found to be negative for HBsAg, HIV-1 and HIV-2 antibodies, HCV, and syphilis.

**Applications:** S100 proteins derived from brain tissue are acidic calcium-binding proteins with molecular weights of about 21 kDa. In human brain tissue S100 proteins are mainly presented by two isoforms – S100BB homodimer and S100A1B heterodimer. Because of their predominant location in astroglial cells, S100 proteins can be used as sensitive and reliable markers for central nervous system injury. Structural damage of glial cells causes leakage of S100 proteins into the extracellular matrix and into cerebrospinal fluid, further releasing into the bloodstream. Measurements of S100 proteins in patient serum samples are useful in monitoring of traumatic brain injury, ischemic brain damage after circulatory arrests, in diagnosis and prognosis of clinical outcome in acute stroke.

S100 proteins are suitable for use as standards in immunoassay and as immunogens for antiserum production.

**Analysis:** Purity > 95 %. After native gel electrophoresis by Ornstein-Davis S100 proteins are presented by two bands corresponding to A1B- and BB-forms.

S100 proteins concentrations are determined by Lowry method using BSA as a standard.

**Presentation:** Lyophilized from 5 mM Tris-HCl, pH 7.5 with 5 mM 2-mercaptoethanol and 5 mM EDTA.

It is recommended to reconstitute this product with deionized water, containing 5 mM 2-mercaptoethanol, to its initial concentration.

**Storage:** Lyophilized and reconstituted at -20 °C (-15 ... -30 °C allowed)

**Material safety note:** This product is sold **for research or further manufacturing use only**. Standard Laboratory Practices should be followed when handling this material.