

S100B

Cat.No. 287 004; Polyclonal Guinea pig antibody, 100 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µl antiserum, lyophilized. For reconstitution add 100 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: not recommended IP: not tested yet ICC: 1 : 500 IHC: 1 : 200 up to 1 : 500 IHC-P/FFPE: 1 : 200
Immunogen	Recombinant protein corresponding to AA 1 to 92 from rat S100B (UniProt Id: P04631)
Reactivity	Reacts with: rat (P04631), mouse (P50114). Other species not tested yet.
Specificity	Specific for S100B

TO BE USED IN VITRO / FOR RESEARCH ONLY

NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

The family of S100 proteins comprises more than 20 members. These proteins are EF-hand Ca²⁺-binding proteins, and are widely distributed in mammalian tissue. Since these proteins are soluble in 100 % saturated ammonium-sulfate solution they have been named S100.

S100B is a frequently used marker protein for mature astrocytes whereas GFAP is also expressed in germinal zone cells that maintained their immature developmental stage.

Selected References SYSY Antibodies

Parvalbumin-expressing ependymal cells in rostral lateral ventricle wall adhesions contribute to aging-related ventricle stenosis in mice.

Filice F, Celio MR, Babalian A, Blum W, Szabolcsi V

The Journal of comparative neurology (2017) 525(15): 3266-3285. **IHC, WB; tested species: mouse**

Zinc Binding to S100B Affords Regulation of Trace Metal Homeostasis and Excitotoxicity in the Brain.

Hagmeyer S, Cristóvão JS, Mulvihill JJE, Boeckers TM, Gomes CM, Grabrucker AM

Frontiers in molecular neuroscience (2017) 10: 456. **ICC; tested species: rat**

Radial glial elements in the cerebral cortex of the lesser hedgehog tenrec.

Mack AF, Künzle H, Lange M, Mages B, Reichenbach A, Härtig W

Brain structure & function (2018) : **IHC**

Glucocorticoid receptor signaling in astrocytes is required for aversive memory formation.

Tertil M, Skupio U, Barut J, Dubovyk V, Wawrzczak-Bargiela A, Soltys Z, Golda S, Kudla L, Wiktorowska L, Szklarczyk K,

Korostynski M, et al.

Translational psychiatry (2018) 8(1): 255. **IHC; tested species: mouse**

Selected General References

S100B-immunopositive astrocytes and oligodendrocytes in the hippocampus are differentially afflicted in unipolar and bipolar depression: a postmortem study.

Gos T, Schroeter ML, Lessel W, Bernstein HG, Dobrowolny H, Schiltz K, Bogerts B, Steiner J

Journal of psychiatric research (2013) 47(11): 1694-9.

S100B and NSE as useful postmortem biochemical markers of traumatic brain injury in autopsy cases.

Ondruschka B, Pohlers D, Sommer G, Schober K, Teupser D, Franke H, Dressler J

Journal of neurotrauma (2013) 30(22): 1862-71.

S100B expression defines a state in which GFAP-expressing cells lose their neural stem cell potential and acquire a more mature developmental stage.

Raponi E, Agenes F, Delphin C, Assard N, Baudier J, Legraverend C, Deloulme JC

Glia (2007) 55(2): 165-77.

Inhibiting S100B restores p53 levels in primary malignant melanoma cancer cells.

Lin J, Yang Q, Yan Z, Markowitz J, Wilder PT, Carrier F, Weber DJ

The Journal of biological chemistry (2004) 279(32): 34071-7.