For Research Use Only

## S100B Recombinant monoclonal antibody, PBS Only

Catalog Number:82271-8-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

1E2

**Basic Information** 

Catalog Number: GenBank Accession Number: 82271-8-PBS BC001766

GeneID (NCBI): Source: Rabbit 6285

**UNIPROT ID:** Isotype: P04271 Full Name: Immunogen Catalog Number:

AG7440 S100 calcium binding protein B

> Calculated MW: 11 kDa Observed MW: 11 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF-P, FC (Intra), Indirect ELISA

Species Specificity: human, mouse, rat

**Background Information** 

S100B is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs and has been implicated in the regulation of cellular activities such as metabolism, motility and proliferation. In the nervous system, S100B is constitutively released by astrocytes into the extracellular space and at nanomolar concentrations,  $it\,can\,promote\,neurite\,outgrowth\,and\,protect\,neurons\,against\,oxidative\,stress.\,Within\,the\,central\,nervous\,system$ (CNS), S100B is thought to be a marker for astroglial activation, linking astrocyte dysfunction to schizophrenia. In addition to astrocytes, S100B is released from many cell types, such as, adipocytes, chondrocytes, cardiomyocytes and lymphocytes. Serum S100B represents a new biomarker for mood disorders.

Storage

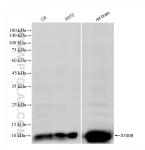
Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

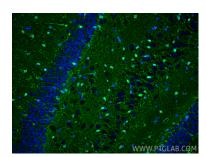
## Selected Validation Data



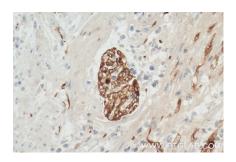
Various lysates were subjected to SDS PAGE followed by western blot with 82271-8-RR (\$100B antibody) at dilution of 1:5150 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82271-8-PBS in a different storage buffer formulation.



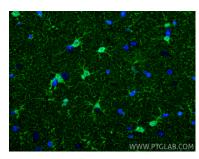
Immunohistochemical analysis of paraffinembedded Human appendicitis tissue slide using 82271-8-RR (S100B antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82271-8-PBS in a different storage buffer formulation.



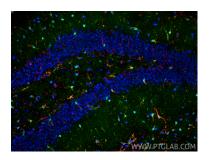
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using S100B antibody (8227-8-RR, Clone: 1E2) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit 1gG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82271-8-PBS in a different storage buffer formulation.



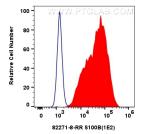
Immunohistochemical analysis of paraffinembedded Human appendicitis tissue slide using 82271-8-RR (S100B antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82271-8-PBS in a different storage buffer formulation.



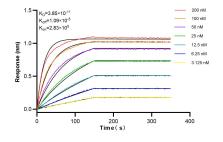
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded rat brain tissue using S100B antibody (82271-8-RR, Clone: 1E2) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82271-8-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using S100B antibody (82271-8-RR, Clone: 1E2) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit 1gG(H+L) (SA00013-2), GFAP antibody (60190-1-lg, Clone: 4B2E10, red). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82271-8-PBS in a different storage buffer formulation.



1x10^6 A375 cells were intracellularly stained with 0.25 ug S100B Recombinant antibody (82271-8-RR, Clone:1E2) and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(IH+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer. This data was developed using the same antibody clone with 82271-8-PBS in a different storage buffer



Biolayer interferometry (BLI) kinetic assays of 82271-8-RR against Human S100 Beta were performed. The affinity constant is 38.5 pM.