Product Datasheet

S100B antibody

Catalog No: #38139

Package Size: #38139-1 50ul #38139-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

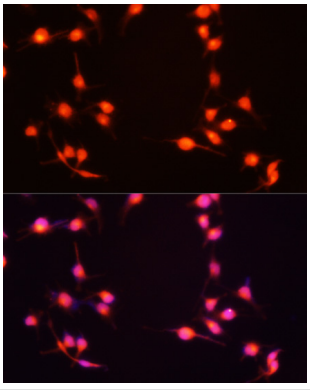
Description

Product Name	S100B antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total S100B protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant Protein of human S100B .
Target Name	S100B
Other Names	S100B;NEF;S100;S100beta;
Accession No.	Swiss-Prot#: P04271NCBI Gene ID: 6285
Uniprot	P04271
GeneID	6285;
SDS-PAGE MW	11kd
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

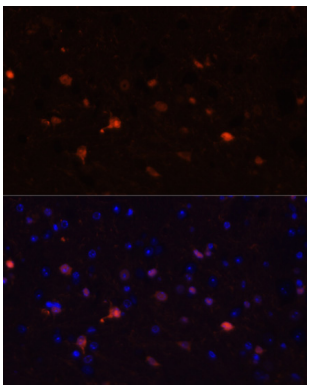
Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:200IF□1:50 - 1:200

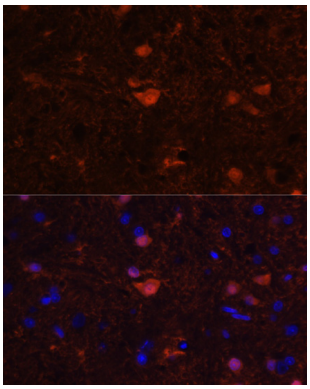
Images



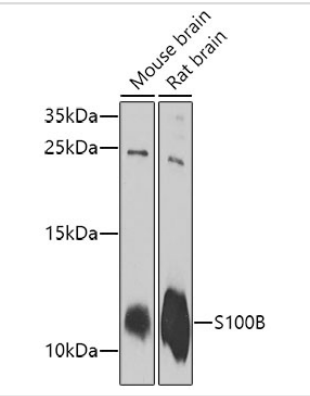
Immunofluorescence analysis of U-251MG cells using S100B at dilution of 1:100 (20x lens). Blue: DAPI for nuclear staining.



Immunofluorescence analysis of mouse brain using S100B at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of rat brain using S100B at dilution of 1:100. Blue: DAPI for nuclear staining.



Western blot analysis of extracts of various cell lines, using S100B at 1:1000 dilution.

Background

Despite their relatively small size (8-12 kDa) and uncomplicated architecture, S100 proteins regulate a variety of cellular processes such as cell growth and motility, cell cycle progression, transcription, and differentiation. To date, 25 members have been identified, including S100A1-S100A18, trichohyalin, filaggrin, repetin, S100P, and S100Z, making it the largest group in the EF-hand, calcium-binding protein family. Interestingly, 14 S100 genes are clustered on human chromosome 1q21, a region of genomic instability. Research studies have demonstrated that significant correlation exists between aberrant S100 protein expression and cancer progression. S100 proteins primarily mediate immune responses in various tissue types but are also involved in neuronal development (1-4).Each S100 monomer bears two EF-hand motifs and can bind up to two molecules of calcium (or other divalent cation in some instances). Structural evidence shows that S100 proteins form antiparallel homo- or heterodimers that coordinate binding partner proximity in a calcium-dependent (and sometimes calcium-independent) manner. Although structurally and functionally similar, individual members show restricted tissue distribution, are localized in specific cellular compartments, and display unique protein binding partners, which suggests that each plays a specific role in various signaling pathways. In addition to an intracellular role, some S100 proteins have been shown to act as receptors for extracellular ligands or are secreted and exhibit cytokine-like activities (1-4).

S100B is abundantly expressed in astrocytes and is commonly used as an astrocytic marker in studies of the mammalian CNS. S100B is also expressed in immature and mature myelinating oligodendrocytes that are chondroitin sulfate proteoglycan (NG2)-positive (5).

Note: This product is for in vitro research use only