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Anti-S100B/S100 Beta Rabbit Monoclonal Antibody

Catalog # ABO13602

Product Information

Application	WB, IHC, IF, ICC, IP
Primary Accession	P04271
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-S100B/S100 Beta Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human, Mouse, Rat.

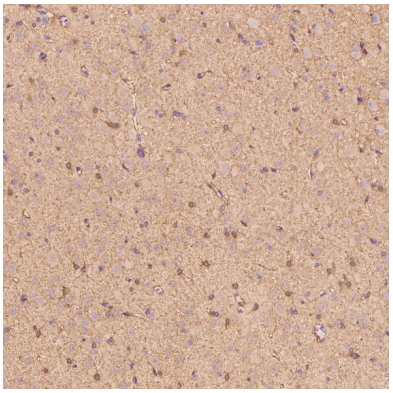
Additional Information

Gene ID	6285
Other Names	Protein S100-B, S-100 protein beta chain, S-100 protein subunit beta, S100 calcium-binding protein B, S100B {ECO:0000303|PubMed:6487634, ECO:0000312|HGNC:HGNC:10500}
Calculated MW	10713
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50
Subcellular Localization	Cytoplasm. Nucleus.
Tissue Specificity	Although predominant among the water-soluble brain proteins, S100 is also found in a variety of other tissues.
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: BCB-19
Immunogen	A synthesized peptide derived from human S100B
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

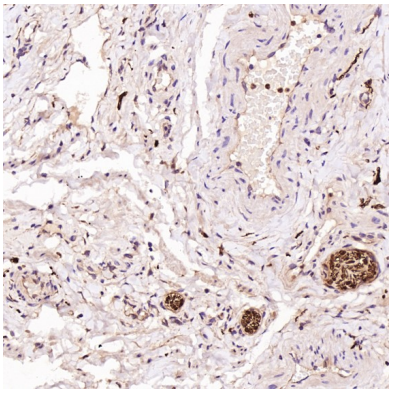
Protein Information

Name	S100B {ECO:0000303|PubMed:6487634, ECO:0000312|HGNC:HGNC:10500}
Function	Small zinc- and- and calcium-binding protein that is highly expressed in astrocytes and constitutes one of the most abundant soluble proteins in brain (PubMed:20950652, PubMed:6487634). Weakly binds calcium but binds zinc very tightly-distinct binding sites with different affinities exist for both ions on each monomer (PubMed:20950652, PubMed:6487634). Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites (By similarity). Acts as a neurotrophic factor that promotes astrocytosis and axonal proliferation (By similarity). Involved in innervation of thermogenic adipose tissue by acting as an adipocyte-derived neurotrophic factor that promotes sympathetic innervation of adipose tissue (By similarity). Binds to and initiates the activation of STK38 by releasing autoinhibitory intramolecular interactions within the kinase (By similarity). Interaction with AGER after myocardial infarction may play a role in myocyte apoptosis by activating ERK1/2 and p53/TP53 signaling (By similarity). Could assist ATAD3A cytoplasmic processing, preventing aggregation and favoring mitochondrial localization (PubMed:20351179). May mediate calcium-dependent regulation on many physiological processes by interacting with other proteins, such as TPR-containing proteins, and modulating their activity (PubMed:22399290).
Cellular Location	Cytoplasm. Nucleus. Secreted {ECO:0000250|UniProtKB:P50114} Note=Secretion into the medium is promoted by interaction with isoform CLSTN3beta of CLSTN3. {ECO:0000250|UniProtKB:P50114}
Tissue Location	Although predominant among the water-soluble brain proteins, S100 is also found in a variety of other tissues

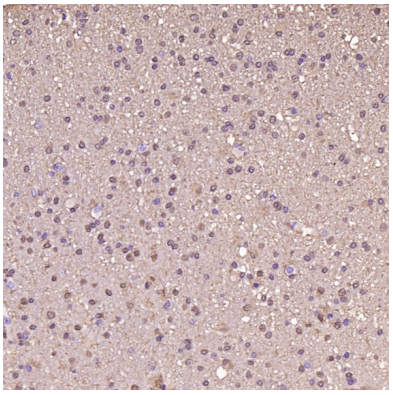
Images



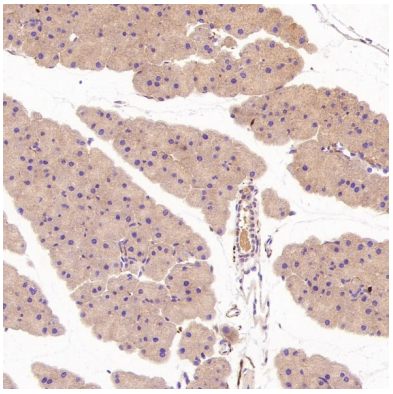
Immunohistochemical analysis of paraffin-embedded Rat cerebral cortex, using the Antibody at 1:500 dilution.



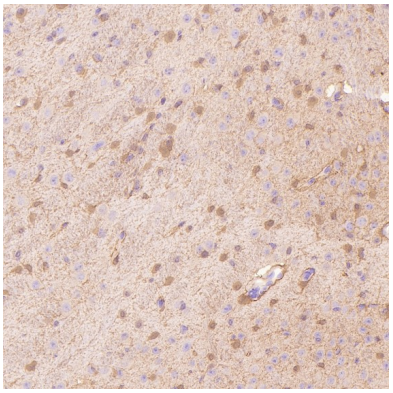
Immunohistochemical analysis of paraffin-embedded Human testis cancer, using the Antibody at 1:250 dilution.



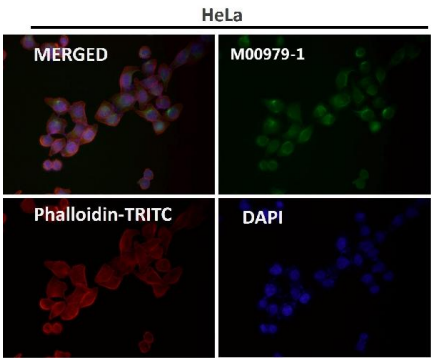
Immunohistochemical analysis of paraffin-embedded Human glioblastoma, using the Antibody at 1:250 dilution.



Immunohistochemical analysis of paraffin-embedded Mouse pancreas, using the Antibody at 1:500 dilution.

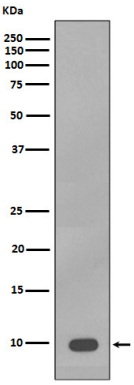


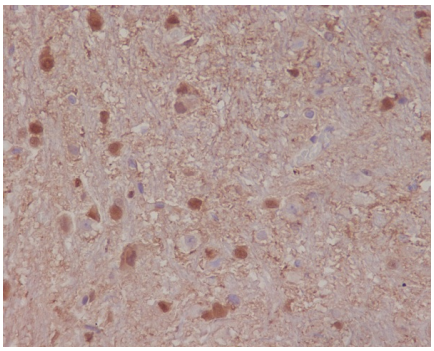
Immunohistochemical analysis of paraffin-embedded Mouse hippocampus , using the Antibody at 1:500 dilution.



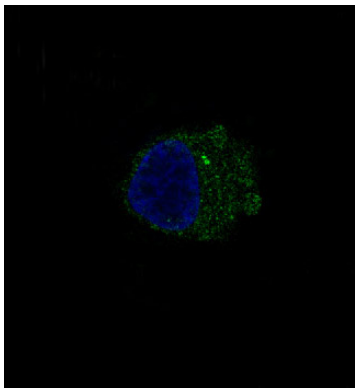
Immunofluorescent analysis using the Antibody at 1:50 dilution.

Western blot analysis of S100B expression in A375 cell lysate.





Immunohistochemical analysis of paraffin-embedded rat brain, using S100B Antibody.



Immunofluorescent analysis of A375 cells, using S100B Antibody .

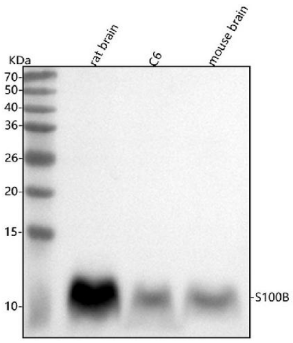


Figure 1. Western blot analysis of S100B using anti-S100B antibody (M00979-1).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: rat brain tissue lysates,
Lane 2: rat C6 whole cell lysates,
Lane 3: mouse brain tissue lysates,
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-S100B antigen affinity purified monoclonal antibody (Catalog # M00979-1) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for S100B at approximately 11 kDa. The expected band size for S100B is at 11 kDa.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.