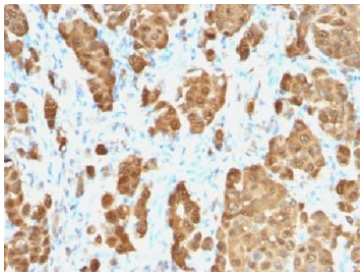
Recombinant S100B Antibody / Rabbit Monoclonal [clone S100B/1706R] (V3350)

Catalog No.	Formulation	Size
V3350-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3350-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3350SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3350IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

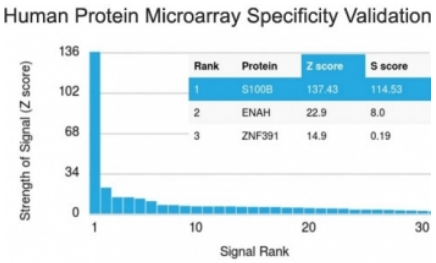
Recombinant RABBIT MONOCLONAL

Bulk quote request

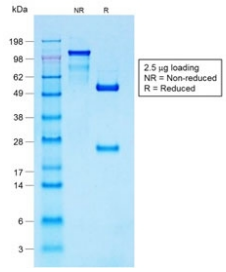
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	S100B/1706R
Purity	Protein A affinity chromatography
UniProt	P04271
Localization	Cytoplasmic, nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml
Limitations	This recombinant S100B antibody is available for research use only.



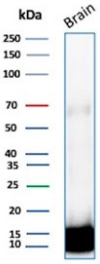
IHC testing of FFPE human melanoma with recombinant S100B antibody. HIER: steam sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min.



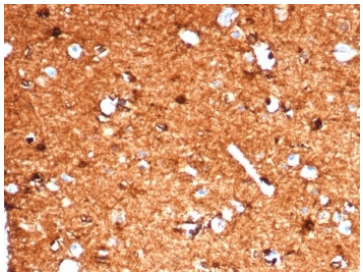
Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant S100B antibody (clone S100B/1706R). These results demonstrate the foremost specificity of the S100B/1706R mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free recombinant S100B antibody as confirmation of integrity and purity.



Western blot testing of human brain tissue lysate with recombinant S100B antibody. Predicted molecular weight ~11 kDa.



IHC testing of FFPE human brain tissue with recombinant S100B antibody. HIER: steam sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min.

Description

Recombinant S100B antibody is designed to detect the calcium binding protein S100B, a member of the S100 family. S100B is abundantly expressed in astrocytes of the central nervous system and in certain other cell types including adipocytes, melanocytes, and chondrocytes. This protein has dual functions, acting both intracellularly to regulate cytoskeletal dynamics and calcium homeostasis, and extracellularly to influence signaling in neighboring cells. Because of these roles, S100B is widely studied in neuroscience, oncology, and inflammation research.

S100B binds calcium ions through EF hand motifs, which allows it to undergo conformational changes that expose interaction surfaces for partner proteins. Within cells, S100B regulates microtubule stability, enzyme activity, and transcriptional responses. Extracellularly, S100B can act as a signaling molecule, engaging receptors such as RAGE to modulate inflammation, cell proliferation, and survival. Its concentration dependent effects range from promoting cell growth at low levels to inducing apoptosis and inflammation at higher levels.

The Recombinant S100B antibody clone S100B/1706R provides high specificity and consistency, making it reliable for

detecting S100B in diverse experimental settings. Clone S100B/1706R has been used to study astrocyte activation, neurodegeneration, and the role of S100B in brain injury. It has also contributed to research on melanoma, where S100B expression correlates with disease progression and prognosis. The recombinant production of this antibody ensures batch to batch uniformity and dependable performance.

Research has linked elevated S100B levels to neurodegenerative conditions such as Alzheimer disease, Parkinson disease, and amyotrophic lateral sclerosis. It is also used as a biomarker for traumatic brain injury, reflecting astrocytic damage. Beyond neurology, S100B expression in tumors such as melanoma has supported its use in oncology as both a diagnostic marker and a potential therapeutic target. Studies using clone S100B/1706R continue to expand understanding of how this protein influences both normal physiology and disease.

NSJ Bioreagents offers this Recombinant S100B antibody to support investigators in neuroscience, oncology, and inflammatory biology. Researchers may also encounter this protein referred to as S100 calcium binding protein B antibody, astrocyte marker antibody, NEF antibody, or protein S100 beta chain antibody, reflecting its importance across multiple fields of study.

Application Notes

The optimal dilution of the recombinant S100B antibody for each application should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Full length human recombinant S100B protein was used as the immunogen for this recombinant S100B antibody.

Storage

Store the recombinant S100B antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).