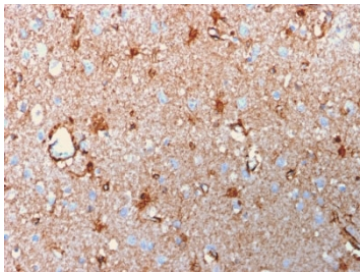
Recombinant S100B Antibody [clone rS100B/1896] (V3556)

Catalog No.	Formulation	Size
V3556-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3556-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3556SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3556IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

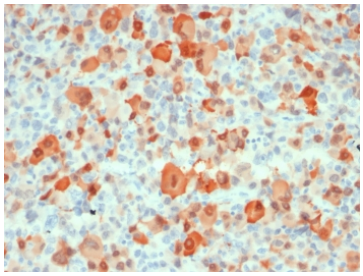
Recombinant MOUSE MONOCLONAL

Bulk quote request

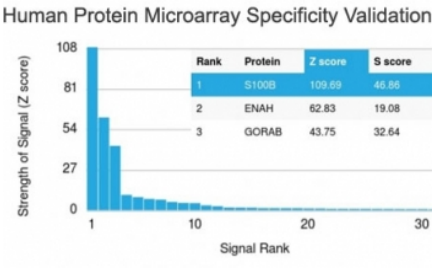
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Recombinant Mouse Monoclonal
Isotype	Mouse IgG1, kappa
Clone Name	rS100B/1896
Purity	Protein G affinity chromatography
UniProt	P04271
Localization	Cytoplasmic, nuclear
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT Western Blot : 1-2ug/ml
Limitations	This recombinant S100B antibody is available for research use only.



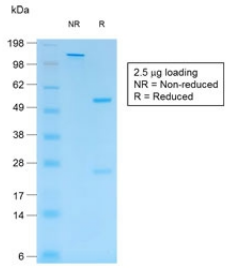
IHC testing of FFPE human brain with recombinant S100B antibody (clone rS100B/1896). HIER: steam sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min.



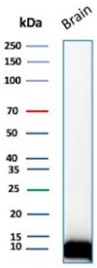
IHC testing of FFPE human melanoma with recombinant S100B antibody (clone rS100B/1896). HIER: steam sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using recombinant S100B antibody (clone rS100B/1896). These results demonstrate the foremost specificity of the rS100B/1012 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 (clone rS100B/1896) as confirmation of integrity and purity.



Western blot testing of human brain tissue lysate with recombinant S100B antibody (clone rS100B/1896). Predicted molecular weight ~11 kDa.

Description

Recombinant S100B antibody is a reliable reagent for detecting S100B, a calcium binding protein that belongs to the S100 family. S100B is most abundantly expressed in astrocytes of the central nervous system, but it is also present in melanocytes, adipocytes, and chondrocytes. This multifunctional protein regulates cytoskeletal dynamics, calcium signaling, and enzyme activity within cells, while also acting extracellularly as a signaling molecule. Its importance has been established in neuroscience, oncology, and inflammation research.

S100B contains EF hand domains that enable calcium binding, which induces conformational changes that promote interactions with partner proteins. Intracellularly, S100B regulates microtubules, transcriptional responses, and protein phosphorylation. When released into the extracellular environment, S100B interacts with receptors such as RAGE, modulating inflammatory signaling and cell survival pathways. The dual roles of S100B contribute to both normal physiology and disease mechanisms.

The Recombinant S100B antibody clone rS100B/1896 delivers consistent and specific detection. Recombinant production

ensures uniformity across batches, making it dependable for sensitive applications. Clone rS100B/1896 has been applied in studies of astrocyte reactivity, traumatic brain injury, and neurodegenerative disorders, as well as in melanoma, where S100B expression is associated with tumor progression. Its reproducibility supports clear and repeatable findings.

Elevated S100B levels are linked to neurological diseases including Alzheimer disease, Parkinson disease, and amyotrophic lateral sclerosis. It is also used as a biomarker for traumatic brain injury and melanoma prognosis. Research using clone rS100B/1896 has clarified how altered S100B expression contributes to pathology and disease monitoring. These studies demonstrate the wide relevance of S100B across biomedical science.

NSJ Bioreagents provides this Recombinant S100B antibody to support investigations into brain health, cancer biology, and immune regulation. Researchers may also encounter the protein described as S100 calcium binding protein B antibody, astrocytic marker antibody, NEF antibody, and protein S100 beta chain antibody. These alternate terms highlight the broad recognition of S100B in research literature.

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).