

Product datasheet for **TA300915**

S100 beta (S100B) Rabbit Monoclonal Antibody [Clone ID: EP1576Y]

Product data:

Product Type:	Primary Antibodies
Clone Name:	EP1576Y
Applications:	IHC, WB
Recommended Dilution:	ICC/IF: Use at an assay dependent dilution; WB: 1:1000; IP: 1:40; IHC-P: Use at an assay dependent dilution
Reactivity:	Mouse, Rat, Goat, Human, Zebrafish, Macaque
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide corresponding to residues on the C-terminus of human S100- β was used as an immunogen.
Formulation:	PBS 49%, Sodium azide 0.01%, Glycerol 50%, BSA 0.05%
Purification:	Tissue culture supernatant
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	11 kDa
Gene Name:	S100 calcium binding protein B
Database Link:	NP_006263 Entrez Gene 20203 Mouse Entrez Gene 25742 Rat Entrez Gene 6285 Human P04271



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Background:

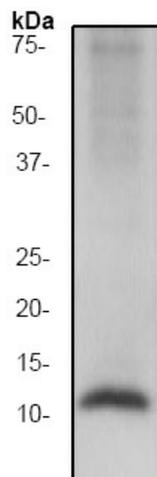
S100- β is a homodimeric member of the EF-hand calcium-binding protein superfamily. The protein has been implicated in cellular processes such as cell differentiation and growth, plays a role in cytoskeletal structure and function, and may have a role in neuropathological diseases, such as Alzheimers. The effects of S100- β are mediated via its interaction with target proteins (1). S100- β protein is a low molecular weight, EF-hand, Ca $^{2+}$ -binding protein widely distributed and conserved in the central nervous system of vertebrates (2). Measurements of Ca $^{2+}$ binding to human brain S100- β (beta beta) protein revealed six Ca $^{2+}$ -binding sites and zinc-binding studies on human S100b protein showed that the protein bound two zinc ions per beta monomer. These results indicate that the Ca $^{2+}$ - and Zn $^{2+}$ -binding sites on S100- β protein are different and suggest that Zn $^{2+}$ may regulate Ca $^{2+}$ binding by increasing the affinity of the protein for calcium (3).

Synonyms:

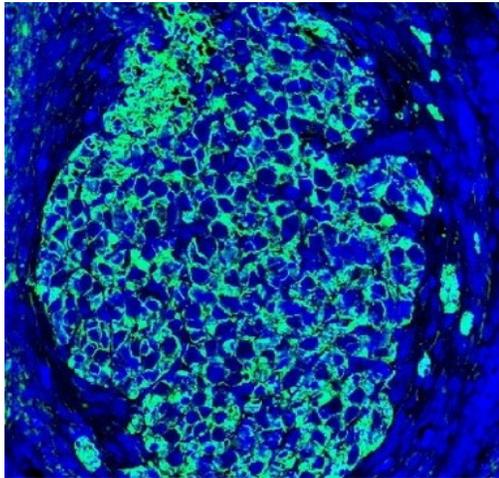
NEF; S100; S100-B; S100beta

Note:

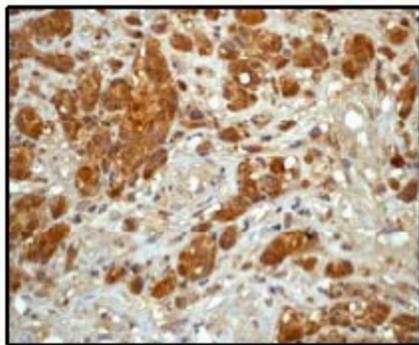
Is unsuitable for Flow Cyt.

Product images:

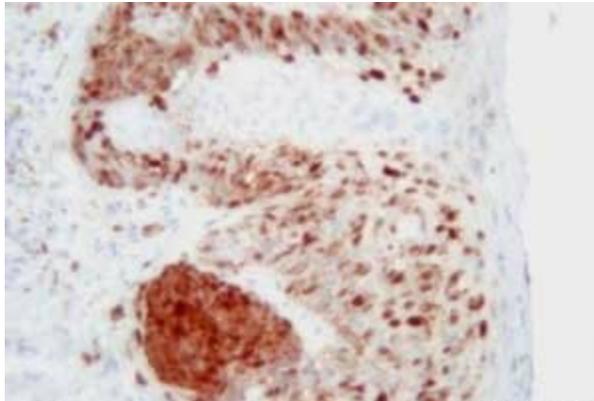
Western blot - S100 beta antibody [EP1576Y]; Anti-S100 beta antibody [EP1576Y] at 1/1000 dilution + A375 cell lysate at 10 ug.Secondary.Goat anti-Rabbit HRP labeled at 1/2000 dilution.Predicted band size : 11 kDa.Observed band size : 11 kDa.



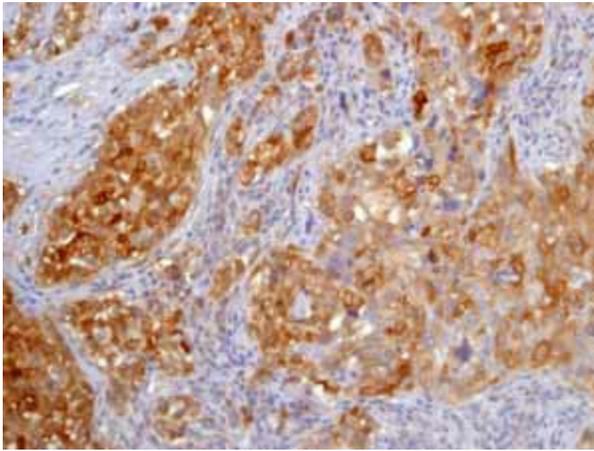
TA300915 staining S100 beta in Human spiral ganglion tissue sections by IHC. Tissue was fixed with paraformaldehyde and blocked with 1% BSA for 30 minutes at RT; antigen retrieval was by heat mediation in citrate buffer, pH 6.0. Samples were incubated with primary antibody (1/200 in PBS-T + 1% BSA) for 12 hours. An Alexa Fluor 488-conjugated Donkey anti-rabbit IgG polyclonal (1/500) was used as the secondary antibody.



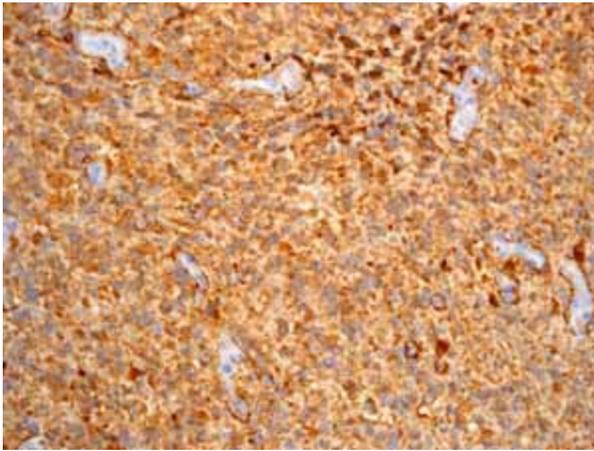
Immunohistochemistry (Paraffin-embedded sections) - S100 beta antibody [EP1576Y]; Ab52642 (1/100) staining human S100 beta in human melanoma tissue by immunohistochemistry using paraffin embedded tissue.



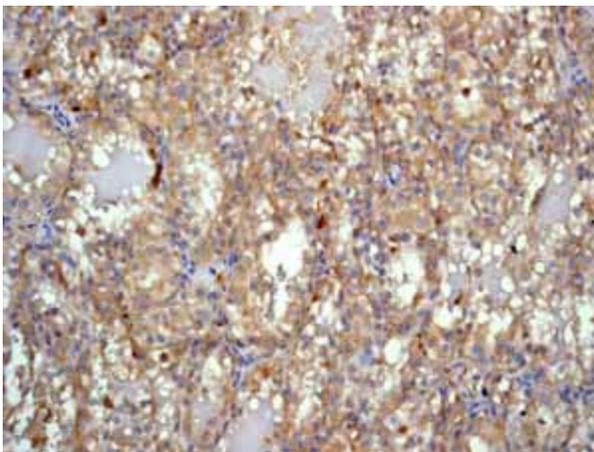
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - S100 beta antibody [EP1576Y]; TA300915 at 1/500 staining human melanoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step was performed, before being blocked and incubated with the antibody for 1 hour. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



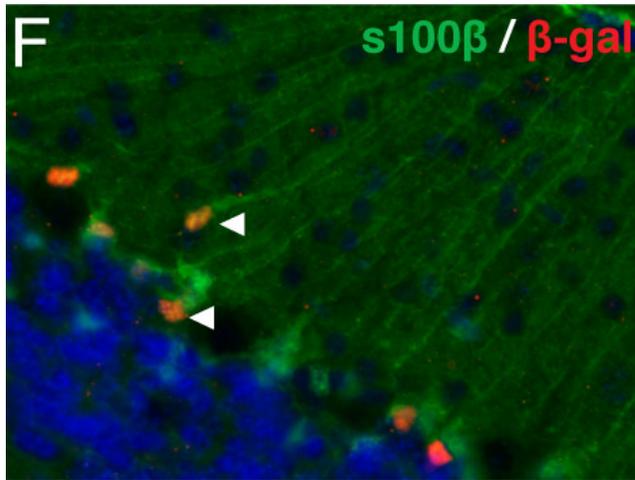
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-S100 beta antibody [EP1576Y] (TA300915); TA300915 showing positive staining in Breast carcinoma tissue.



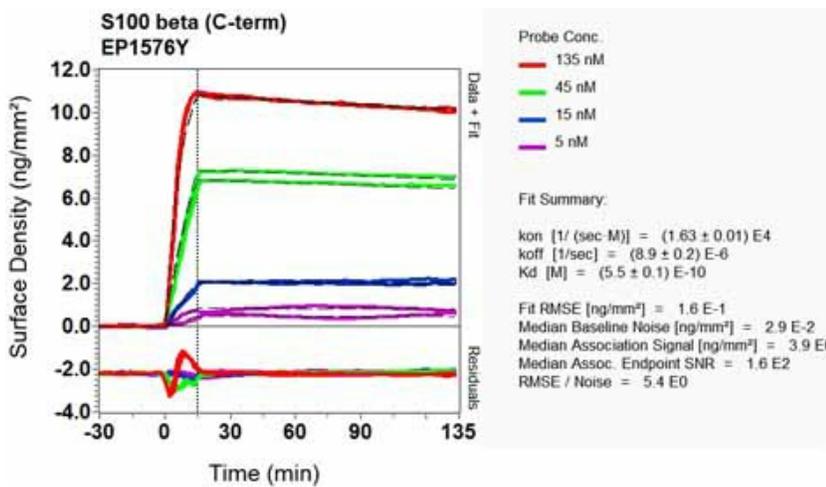
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)-Anti-S100 beta antibody [EP1576Y] (TA300915); TA300915 showing positive staining in Glioma tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100 beta antibody [EP1576Y]; TA300915 showing positive staining in Clear cell carcinoma of kidney tissue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-S100 beta antibody [EP1576Y]; Immunohistochemical analysis of embryonic mouse brain tissue, staining S100 beta with TA300915.



Other-Anti-S100 beta antibody [EP1576Y] (TA300915); Equilibrium dissociation constant (KD).