

S100 beta Rabbit mAb

Catalog No: #48942



Package Size: #48942-1 50ul #48942-2 100ul

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

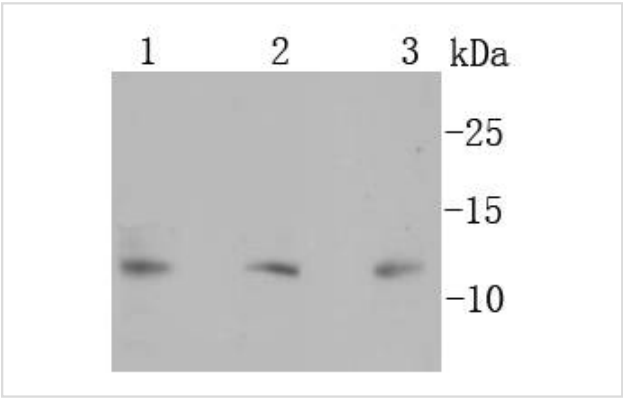
Description

Product Name	S100 beta Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SC57-02
Purification	ProA affinity purified
Applications	WB, ICC/IF, IP, IHC, FC
Species Reactivity	Hu, Ms, Rt, Goat, zebrafish
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	NEF antibody Protein S100 B antibody Protein S100-B antibody S 100 calcium binding protein beta chain antibody S 100 protein beta chain antibody S-100 protein beta chain antibody S-100 protein subunit beta antibody S100 antibody S100 calcium binding protein beta (neural) antibody S100 calcium-binding protein B antibody S100 protein beta chain antibody S100B antibody S100B_HUMAN antibody S100beta antibody
Accession No.	Swiss-Prot#:P04271
Calculated MW	11 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

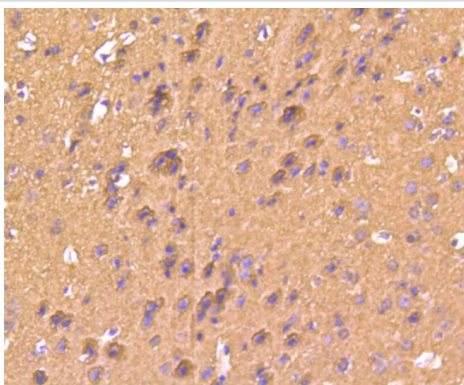
Application Details

WB: 1:1,000-5,000IHC: 1:50-1:200ICC: 1:50-1:200FC: 1:1,000

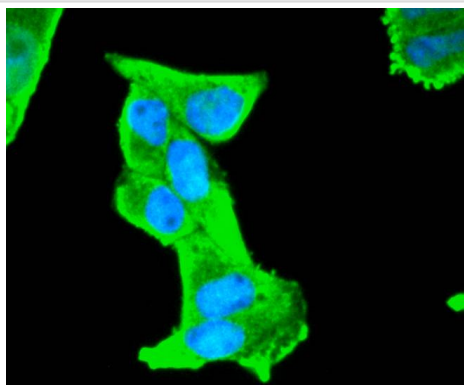
Images



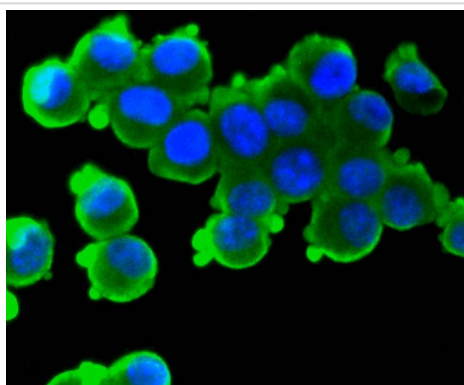
Western blot analysis of S100 beta on different lysates using anti-S100 beta antibody at 1/1,000 dilution. Positive control:
Lane 1: Mouse liver Lane 2: Mouse heart Lane 3: Hela



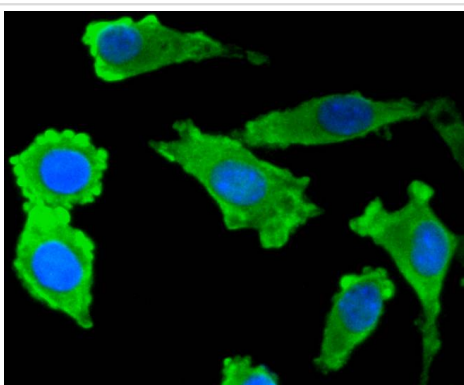
Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-S100 beta antibody. Counter stained with hematoxylin.



ICC staining S100 beta in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining S100 beta in N2A cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining S100 beta in SH-SY-5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

The family of EF-hand type Ca^{2+} -binding proteins includes calbindin (previously designated vitamin D-dependent Ca^{2+} -binding protein), S-100 α and β , calgranulins A (also designated MRP8), B (also designated MRP14) and C (S-100 like proteins), and the parvalbumin family members, including parvalbumin α and parvalbumin β (also designated oncomodulin). The S-100 protein is involved in the regulation of cellular processes such as cell cycle progression and differentiation. Research also indicates that the S-100 protein may function in the activation of Ca^{2+} induced Ca^{2+} release, inhibition of microtubule assembly and inhibition of protein kinase C mediated phosphorylation. Two S-100 subunits, sharing 60% sequence identity, have been described as S-100 α chain and S-100 β chain. Three S-100 dimeric forms have been characterized, differing in their subunit composition of either two α chains, two β chains or one α and one β chain. S-100 localizes to the cytoplasm and nuclei of astrocytes, Schwann's cells, ependymomas and

astrogliomas. S-100 is also detected in almost all benign naevi, malignant melanocytic tumours and in Langerhans cells in the skin. Calbindin, S-100 proteins and parvalbumin proteins are each expressed in neural tissues. In addition, S-100 α and β are present in a variety of other tissues, and calbindin is present in intestine and kidney.

References

1. Miyamoto Y et al. Involvement of the Tyro3 receptor and its intracellular partner Fyn signaling in Schwann cell myelination. *Mol Biol Cell* 26:3489-503 (2015).
2. Gondo A et al. Sustained Down-regulation of α -Dystroglycan and Associated Dysfunctions of Astrocytic Endfeet in Epileptic Cerebral Cortex. *J Biol Chem* 289:30279-88 (2014).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.