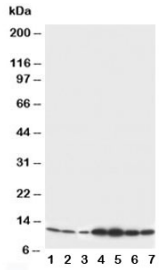
S100 beta Antibody (R30360)

Catalog No.	Formulation	Size
R30360	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P04271
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml
Limitations	This S100 beta antibody is available for research use only.



Western blot testing of S100 beta antibody and Lane 1: rat brain; 2: rat brain; 3: MCF-7; 4: HeLa; 5: SMMC-7721; 6: Jurkat; 7: COLO320 cell lysate. Predicted/observed molecular weight: ~11kDa.

Description

S100 calcium binding protein B or S100B is a protein of the S-100 protein family. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21; however, this gene is located at 21q22.3. S100B is a glial-derived protein that is a well-established biomarker for severity of neurological injury and prognosis for recovery. S100 beta is a calcium-binding protein that is expressed at high levels in brain primarily by astrocytes. Addition of the disulfide-bonded dimeric form of S100 beta to primary neuronal and glial cultures and established cell lines induces axonal extension and alterations in astrocyte proliferation and phenotype, but evidence that S100 beta exerts the same effects in vivo has not been presented. Reeves et al.(1994) demonstrated that the same effects of the S100B protein are exerted in

vivo. They found that both astrocytosis and neurite proliferation occurred in transgenic mice expressing elevated levels of S100b. They suggested that these transgenic mice represent a useful model for studies of the role of S100B in glial-neuronal interactions in normal development and function of the brain and for analyzing the significance of elevated levels of the protein in Down syndrome and Alzheimer disease.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the S100 beta antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human S100 beta (DGDGECDFQEFMAFV) was used as the immunogen for this S100 beta antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the S100 beta antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.