



Anti-S-100 Protein polyclonal antibody (DPAB-TJ009)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	This antibody stains schwannoma, ependymomas, astrogliomas, almost all benign and malignant melanoma and their metasis.
Immunogen	Purified S100 protein from bovine.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Bovine
Conjugate	Unconjugated
Applications	IHC, ICC
Molecular Weight	~22 kDa
Cellular Localization	Cytoplasmic
Positive Control	Melanoma or schwannoma.
Format	Prediluted for IHC
Concentration	~5 μg/ml
Buffer	Concentrated antibodies purified on Protein A column are supplied in 10 mM PO4, 150 mM NaCl, pH 7.4, 1% BSA, 0.05% sodium azide. Prediluted antibodies are supplied in our prediluted green buffer.
Preservative	0.05% Sodium Azide

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BACKGROUND

Introduction

S100 protein is a type of low molecular weight protein found in vertebrates characterized by two calcium binding sites of the helix-loop-helix ("EF-hand type") conformation. There are at least 21 different types of S100 proteins. The name is derived from the fact that the protein is 100% Soluble in ammonium sulfate at neutral pH. Most S100 proteins are homodimeric, consisting of two identical polypeptides held together by non-covalent bonds. S100A is composed of an alpha and beta chain whereas S100B is composed of two beta chains. Although S100 proteins are structurally similar to calmodulin, they differ in that they are cell-specific, expressed in particular cells at different levels depending on environmental factors. To contrast, calmodulin is a ubiquitous and universal intracellular Ca++ receptor widely expressed in many cells.S-100 is normally present in cells derived from the neural crest (Schwann cells, melanocytes, and glia cells), chondrocyte, adipocytes, myoepithelial cells, macrophages, Langerhans cells, dendritic cells, and keratinocytes. It may be present in some breast epithelial cells.

Keywords

S100 Protein; S100; S-100 proteins

GENE INFORMATION

Entrez Gene ID	<u>6271</u>
UniProt ID	<u>B2R5D9</u>
References	 Wosik, K et. al. J. Neurosci. 27: 9032-9042, 2007 Joshi, MG et. al. Modern Pathol. 9: 57-62, 1996