G-Biosciences Image not found or type unknown

Immunotag™ S-100 β Monoclonal Antibody

Antibody Specification

Catalog No.	ITM0572
Product Description	Immunotag™ S-100 β Monoclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	S-100 β
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of S-100 β expressed in E. Coli.
Specificity	S-100 β Monoclonal Antibody detects endogenous levels of S-100 β protein.
Purification	Affinity purification
Form	Ascitic fluid containing 0.03% sodium azide.
Gene Name	S100B
Accession No.	P04271 P50114
Alternate Names	S100B; Protein S100-B; S-100 protein beta chain; S-100 protein subunit beta; S100 calcium-binding protein B

Antibody Specification

Description	S100 calcium binding protein B(S100B) Homo sapiens The protein encoded by this gene is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. S100 genes include at least 13 members which are located as a cluster on chromosome 1q21; however, this gene is located at 21q22.3. This protein may function in Neurite extension, proliferation of melanoma cells, stimulation of Ca2+ fluxes, inhibition of PKC-mediated phosphorylation, astrocytosis and axonal proliferation, and inhibition of microtubule assembly. Chromosomal rearrangements and altered expression of this gene have been implicated in several neurological, neoplastic, and other types of diseases, including Alzheimer's disease, Down's syndrome, epilepsy
Protein Expression	Skin,
Subcellular Localization	ruffle,extracellular region,extracellular space,nucleus,cytoplasm,neuronal cell body,intracellular membrane-bounded organelle,perinuclear region of cytoplasm,
Protein Function	function:Weakly binds calcium but binds zinc very tightly-distinct binding sites with different affinities exist for both ions on each monomer. Physiological concentrations of potassium ion antagonize the binding of both divalent cations, especially affecting high-affinity calcium-binding sites. Binds to and initiates the activation of STK38 by releasing autoinhibitory intramolecular interactions within the kinase.,miscellaneous:In addition to metal-ion binding, this protein is involved with the regulation of protein phosphorylation in brain tissue.,similarity:Belongs to the S-101 family.,similarity:Contains 2 EF-hand domains.,subunit:Dimer of either two alpha chains, or two beta chains, or one alpha and one beta chain. The S100B dimer binds two molecules of STK38 (By similarity). The S100B dimer interacts with two molecules of CAPZA1.,tissue specificity:Although predominant among the water-soluble brain proteins, S100 is also found in a variety of other tissues.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.