S100 Protein (P)
Concentrated and Prediluted Polyclonal Antibody
902-021-092017

Catalog Number: ACR 021 A, B, C
Description: 0.1, 0.5, 1.0 ml, concentrated APR 021 AA
Dilution: 1:100
Diluent: Da Vinci Green

Intended Use:
For Research Use Only. Not for use in diagnostic procedures.

Summary and Explanation:
S100 recognizes proteins of 21-24 kDa, identified as the A and B subunits of S100 protein. S100 belongs to the family of calcium binding proteins such as calmodulin and tropinin C. S100A is composed of an alpha and beta chain whereas S100B is composed of two beta chains. Antibody S100 stains Schwannomas, ependymomas, astroglomas, and almost all benign and malignant melanomas and their metastases (1-6). Studies have shown S100 protein is also expressed in the antigen presenting cells such as the Langerhan's cells in skin and interdigitating reticulum cells in the paracortex of lymph nodes. Histocytosis X can also be confirmed by S100 staining. S100 protein antibody is excellent for immunohistochemical staining of formalin-fixed, paraffin-embedded tissues. S100 protein is highly soluble and may be eluted from frozen tissue during staining.

Principle of Procedure:
Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, an enzyme labeled polymer is added to bind to the primary antibody. This detection of the bound antibody is evidenced by a colorimetric reaction.

Source: Rabbit polyclonal
Species Reactivity: Human, mouse and rat
Clone: N/A
Isotype: N/A

Total Protein Concentration: ~10 mg/ml. Call for lot specific Ig concentration.

Epitope/Antigen: S100 Protein
Cellular Localization: Cytoplasmic and nuclear
Positive Tissue Control: Melanoma or Schwannoma

Known Applications:
Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As:
Buffer with protein carrier and preservative

Storage and Stability:
Store at 2°C to 8°C. Do not use reagent after the expiration date printed on the vial.

Peroxide Block:
Block for 5 minutes with Biocare's Peroxidized 1.

Pre-treatment: N/A

Protein Block (Optional): Incubate for 5-10 minutes at RT with Biocare's Peroxidase 1.

Primary Antibody: Incubate for 30 minutes at RT.

Probe: N/A

Polymer: Incubate for 30 minutes at RT with a secondary-conjugated polymer.

Chromogen: Incubate for 5 minutes at RT with Biocare's DAB - OR - Incubate for 5-7 minutes at RT with Biocare's Warp Red.

Counterstain:
Counterstain with hematoxilin. Rinse with deionized water. Apply Tacha's Bluing Solution for 1 minute. Rinse with deionized water.

Technical Note:
This antibody has been standardized with Biocare's MACH 4 detection system. Use TBS buffer for washing steps.

Limitations:
This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.

Precautions:
1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (Na3N3) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976) (7)
2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come into contact with sensitive areas, wash with copious amounts of water. (8)
3. Microbial contamination of reagents may result in an increase in nonspecific staining.
4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
5. Do not use reagent after the expiration date printed on the vial.
6. The SDS is available upon request and is located at http://biocare.net.

Technical Support:
Contact Biocare's Technical Support at 1-800-542-2002 for questions regarding this product.

References: