Anti– human S100P Mouse Monoclonal Primary Antibody

Clone: UMAB24

**Intended use**

Anti-human S100P (Clone: UMAB24) Mouse Monoclonal Primary Antibody is intended for detection of S100 calcium-binding protein P expression in frozen or formalin fixed human tissues and cells. The clinical interpretation of any positive staining or its absence should be complemented by morphological and histological studies with proper controls. Evaluations should be made within the context of the patient’s clinical history and other diagnostic tests by a qualified pathologist. The antibody is intended for *in vitro* diagnostic (IVD) use.

**Background**

S100P 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 proteins show variable cell-type-specific expression pattern. This protein was isolated from human placenta and given the designation “P”.

Alternative names: S100 calcium-binding protein P, MIG9

**Reagent provided**

Anti-human S100P Mouse Monoclonal Primary Antibody (Clone: UMAB24) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1. The protein concentration is approximately 0.4 +/- 0.05 mg/mL.

For immunohistochemistry, the primary antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissue. It can be dependent upon the detection system used. These are guidelines only, and optimal dilutions should be determined by the individual laboratory.

**Immunogen**

Full length recombinant protein of human S100P (NP_005971) produced in HEK293T cells.
Specificity
The specificity of the anti-human S100P Mouse Monoclonal Primary Antibody was established on human colon cancer, normal human lung, liver and placenta tissues. The anti-S100P presented no staining on normal human liver and lung, and positive staining on human colon cancer and placenta tissue using immunohistochemical (IHC) test methods.

Materials Required but Not Supplied
Antibody diluent, HIER solution, Antibody detection kits, Chromogen, Substrate, negative and positive tissue control slides are not included.

Precautions
1. For use by trained professionals only.
2. This product contains sodium azide (NaNO₃), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaNO₃ may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
3. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
4. Unused reagents should be disposed of according to local, State, and Federal regulations.

Storage
Store at 2-8°C. Do not use the product past the expiration date indicated on the label. If reagents are stored under any other conditions, the end user must verify the acceptability of those conditions. There are no obvious signs to indicate instability of this product therefore, positive and negative controls should be run simultaneously with patient specimens.

Specimen Preparation
Paraffin Sections
Anti-human S100P Mouse Monoclonal Primary Antibody can be used on paraffin-embedded tissue sections at a working dilution of 1:100 to 1:200. We recommend 20 minutes of pretreatment with Heat Induced Epitope Retrieval (HIER) using Citrate pH 6.0 buffer from GBI Labs (B05C-100). The dilutions are estimates; the actual staining results may vary due to reagents and detection protocols used. Validation of antibody performance and final protocol are the responsibility of the end user.

Staining procedure
Manual Staining Procedure
1. Deparaffinize slides.
2. Submerge slides in 3% peroxidase quenching solution for ~10 minutes and rinse with distilled water 2 times, 2 minutes each.
3. Heat Induced Epitope Retrieval is required for this antibody. We recommend incubating the slides in Citrate pH 6.0 buffer [GBI Labs B05C-100] at 95-100°C for 20 minutes or using the pressure cooker at high pressure for 2 minutes.
4. Wash with PBS buffer 3 times, 2 minutes each before staining. Apply serum blocking solution.[Optional]
5. Apply primary antibody and incubate for 30-60 minutes at room temperature. After incubation wash with PBS-T 3 times, 2 minutes each.
6. Apply secondary antibody and incubate according to the data sheet of the detection system. Wash with PBS-T 3 times, 2 minutes each.
7. Apply enzyme conjugate and incubate according to data sheet of detection system. Wash with PBS-T 3 times, 2 minutes each.
8. Apply chromogen and incubate 5-10 minutes and rinse with distilled water.

Staining interpretation
The cellular staining pattern for Anti-human S100P Mouse Monoclonal Primary Antibody is selectively cytosolic.

Performance Characteristics
Normal human liver and lung tissues were shown to be negative for this antibody.

Anti-human S100P Mouse Monoclonal Primary Antibody (Clone: UMAB24) produced selective cytosolic staining when screened on human colon cancer and normal human placenta tissue.
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