

MTAP (Tumor Suppressor Marker) (MSVA-741R)

Format	Catalog No.	Pack size	Dilution
Concentrated	G4507 A, B, C	0.1, 0.5, 1.0 mL	1:100 - 200
Prediluted	G4507 AA, BB	6.0, 3.0 mL	Ready to use

ANTIBODY SPECIFICATIONS

- **Host Species:** Rabbit
- **Clone:** MSVA-741R
- **Isotype:** IgG / Kappa
- **Cellular Localization:** Cytoplasm and Nucleus
- **Immunogen:** Recombinant fragment of human MTAP protein (aa 97–196)
- **Molecular Weight:** ~31 kDa
- **Species Reactivity:** Human
- **Positive Controls:** Ovarian tissue stroma (should show moderate cytoplasmic and/or nuclear staining)

INTENDED USE

This antibody is intended **for research use only (RUO)** and is not approved for diagnostic or therapeutic applications. It is optimized for the detection of MTAP protein in formalin-fixed, paraffin-embedded (FFPE) human tissues by immunohistochemistry (IHC).

SUMMARY AND APPLICATION

MTAP (5'-methylthioadenosine phosphorylase) plays a critical role in polyamine metabolism and in the salvage pathways of adenine and methionine. MTAP is frequently deleted in various cancers due to its proximity to the tumor suppressor gene p16INK4A. The loss of MTAP expression is often associated with increased malignancy. This antibody is ideal for investigating tumor suppressor mechanisms, especially in cancers with deletions in the CDKN2A locus.

SCIENTIFIC BACKGROUND

MTAP is a 31 kDa cytoplasmic and nuclear enzyme responsible for the phosphorolysis of methylthioadenosine (MTA), a key step in purine and methionine salvage. Its absence in tumor cells, often due to co-deletion with p16INK4A, makes MTAP a relevant biomarker for cancer research. MTAP expression is associated with reduced tumor proliferation, and its presence may influence cellular susceptibility to antifolate-based therapies. Its profiling aids in tumor stratification and therapeutic targeting in multiple cancer types.



RECOMMENDED USAGE

- **IHC Protocol Highlights:**
 - Dilution: 1–2 µg/mL
 - Incubation: 30 minutes at room temperature
 - Antigen Retrieval: Heat in 10 mM Tris with 1 mM EDTA (pH 9.0) at 95°C for 45 minutes, followed by cooling
- **Specimen Type:** FFPE sections, preferably ~4 µm

FORMULATION & STORAGE:

- Buffer: 10 mM PBS, 0.05% BSA, 0.05% sodium azide
- Storage:
 - Dilution: 1–2 µg/ML
 - Without azide: –20 to –80°C
- Shelf Life: 24 months under proper conditions
- Hazard Classification: Non-hazardous; no MSDS required

LIMITATIONS

- Interpretation must be made by a qualified pathologist
- Tissue fixation and handling may affect staining quality
- Negative results do not always indicate absence of antigen—consider panel testing

PRECAUTIONS

- Contains 0.05% sodium azide – avoid ingestion and contact with skin or mucosa
- Wear gloves and avoid contact with eyes or mucosa
- Do not use reagents past expiration or if packaging appears compromised
- Do not pipette by mouth or reuse slides/containers without proper sterilization

TECHNICAL SUPPORT

For technical assistance, please contact Genebio Solution's Technical Support at www.genebiosolution.com



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