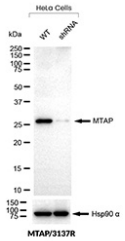
MTAP Antibody / Knockdown-Validated Metabolic Marker Antibody [clone MTAP/3137R] (V7439)

Catalog No.	Formulation	Size
V7439-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7439-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7439SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V7439IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

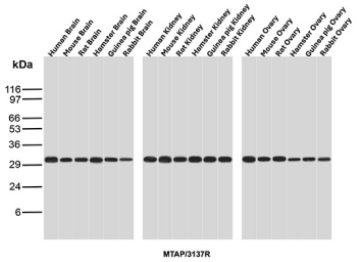
Recombinant RABBIT MONOCLONAL

Bulk quote request

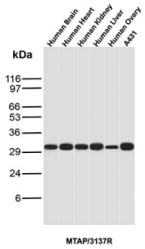
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat, Hamster, Rabbit, Guinea pig
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	MTAP/3137R
Purity	Protein A affinity chromatography
UniProt	Q13126
Localization	Cytoplasmic
Applications	ELISA: 2-4ug/ml (order BSA/azide-free format) Western blot: 2-4ug/ml (Human/Mouse/Rat/Hamster/Rabbit/Guinea pig) Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT (Human)
Limitations	This MTAP Antibody / Knockdown-Validated Metabolic Marker Antibody is available for research use only.



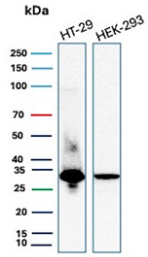
MTAP Antibody Knockdown Validation WB. Western blot analysis of MTAP expression in wild-type (WT) and MTAP shRNA knockdown HeLa cells using MTAP antibody clone MTAP/3137R. Lane 1: WT lysate, Lane 2: shRNA knockdown lysate. A band is detected at approximately 30-35 kDa in WT cells and is reduced in knockdown cells, supporting target-specific detection. Hsp90 alpha is shown as a loading control.



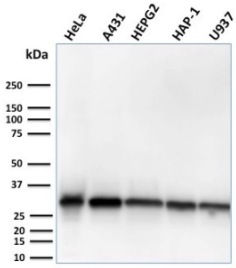
MTAP Antibody Cross-Species WB. Western blot analysis of MTAP expression across brain, kidney, and ovary tissues from multiple species using MTAP antibody clone MTAP/3137R. A consistent band at approximately 30-35 kDa is observed, supporting conserved expression across species.



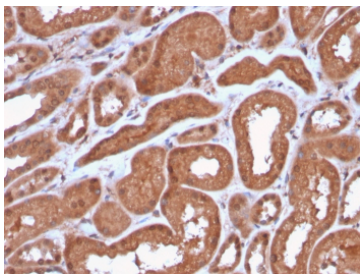
MTAP Antibody Tissue Panel WB. Western blot analysis of MTAP expression in human brain, heart, kidney, liver, ovary, and A431 cell lysates using MTAP antibody clone MTAP/3137R. A band is detected at approximately 30-35 kDa across multiple tissues, reflecting broad expression of MTAP in metabolically active cells.



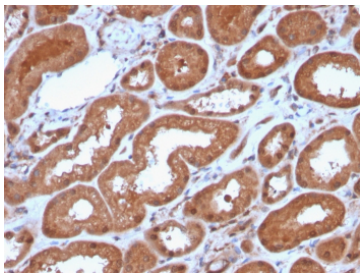
MTAP Antibody Cell Line Comparison WB. Western blot analysis of MTAP expression in HT-29 and HEK293 cell lysates using MTAP antibody clone MTAP/3137R. A band is detected at approximately 30-35 kDa, consistent with MTAP expression in epithelial-derived cell lines.



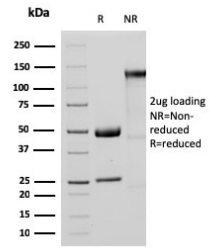
MTAP Antibody Cell Line WB. Western blot analysis of MTAP expression in HeLa, A431, HepG2, HAP-1, and U937 cell lysates using MTAP antibody clone MTAP/3137R. A band is detected at approximately 30-35 kDa across multiple cell lines, consistent with the predicted molecular weight of MTAP.



MTAP Antibody Kidney IHC. Immunohistochemical analysis of Methylthioadenosine phosphorylase (MTAP) in formalin-fixed, paraffin-embedded human kidney tissue using MTAP antibody clone MTAP/3137R. Strong cytoplasmic staining is observed in renal tubular epithelial cells, consistent with MTAP expression in metabolically active tissues. HIER: steam sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to staining.



MTAP Antibody Renal Tubule IHC. Immunohistochemical analysis of MTAP expression in FFPE human kidney tissue using MTAP antibody clone MTAP/3137R. Diffuse cytoplasmic staining highlights tubular epithelial structures, while surrounding stromal elements show lower signal, reflecting tissue-specific metabolic activity. HIER: steam sections in pH 9 10 mM Tris with 1 mM EDTA for 20 min followed by cooling prior to staining.



MTAP Antibody SDS-PAGE (Reducing vs Non-Reducing). SDS-PAGE analysis of MTAP antibody clone MTAP/3137R under reducing (R) and non-reducing (NR) conditions. Bands corresponding to antibody heavy and light chains are observed under reducing conditions, reflecting expected antibody structure.

Description

Methylthioadenosine phosphorylase (MTAP) is a cytoplasmic metabolic enzyme that plays a central role in the methionine salvage pathway, catalyzing the conversion of methylthioadenosine into adenine and methylthioribose-1-phosphate. This reaction supports nucleotide recycling and methionine homeostasis, linking MTAP activity directly to cellular metabolism, growth, and proliferative capacity. MTAP (MTAP) is broadly expressed in normal human tissues, particularly within epithelial and parenchymal cell populations that exhibit active metabolic turnover. The MTAP Antibody / Knockdown-Validated Metabolic Marker Antibody is designed to detect this enzyme with high specificity, supported by functional gene silencing data and robust biochemical performance. This antibody is part of a collection of knockdown validated antibodies that have been functionally assessed using gene silencing approaches to support target-specific detection.

MTAP antibody, also referred to as Methylthioadenosine phosphorylase antibody and MTAP enzyme antibody, recognizes a protein that is widely distributed in normal tissues and frequently used as a marker of metabolic integrity. Western blot analysis demonstrates a clear and consistent band at approximately 30-35 kDa across multiple human cell lines and tissue lysates, consistent with the predicted molecular weight of MTAP. This clone shows strong and reproducible band detection across diverse sample types, supporting reliable use in protein expression studies. Importantly, knockdown validation using MTAP-targeted shRNA in HeLa cells results in a clear reduction of the MTAP band compared to wild-type controls, providing direct functional evidence that the detected signal corresponds to the intended target. This gene silencing-based validation establishes a strong link between protein expression and antibody signal, making this clone particularly well suited for applications requiring high specificity.

Functionally, MTAP is closely linked to cellular metabolic pathways that regulate nucleotide balance and methylation status. The MTAP gene is located on chromosome 9p21 in close proximity to CDKN2A, and co-deletion of these loci is a frequent event in many cancers. As a result, loss of MTAP expression is commonly observed in tumor cells and is associated with altered metabolic states and disruption of tumor suppressor pathways. This relationship has made MTAP a valuable marker in cancer research, particularly in studies examining metabolic vulnerabilities and genomic deletions.

In immunohistochemistry, MTAP exhibits a characteristic cytoplasmic staining pattern consistent with its enzymatic function. Analysis of formalin-fixed, paraffin-embedded human kidney tissue demonstrates strong and diffuse cytoplasmic staining in renal tubular epithelial cells, reflecting high metabolic activity and intact MTAP expression in normal tissue. This consistent baseline expression provides a useful reference for identifying loss or reduction of MTAP in tumor samples. In tissue-based analyses, MTAP-negative tumor cells can often be distinguished from surrounding MTAP-positive stromal or non-neoplastic cells, creating a clear and interpretable contrast that supports evaluation of tumor-associated gene loss.

The combination of strong western blot performance, cross-sample consistency, and knockdown validation makes clone MTAP/3137R a well-characterized reagent for studies of metabolic regulation and tumor biology. Its ability to reliably detect MTAP expression in both biochemical and tissue-based contexts supports its use in research focused on metabolic pathways, cell cycle-associated processes, and cancer-associated genomic alterations.

This MTAP antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the MTAP Antibody / Knockdown-Validated Metabolic Marker Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

A portion of amino acids 97-196 from the human protein was used as the immunogen for the recombinant MTAP antibody.

Storage

Store the MTAP antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

MTAP antibody, Methylthioadenosine phosphorylase antibody, MTAP IHC antibody, MTAP WB antibody, MTAP knockdown antibody

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