

# ASMT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP4790c

## Product Information

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<b>Application</b>	WB, IHC-P, FC, E
<b>Primary Accession</b>	<a href="#">P46597</a>
<b>Reactivity</b>	Human
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB23845
<b>Calculated MW</b>	38453
<b>Antigen Region</b>	212-241

## Additional Information

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<b>Gene ID</b>	438
<b>Other Names</b>	Acetylserotonin O-methyltransferase, Hydroxyindole O-methyltransferase, HIOMT, ASMT
<b>Target/Specificity</b>	This ASMT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 212-241 amino acids from the Central region of human ASMT.
<b>Dilution</b>	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
<b>Format</b>	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	ASMT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ASMT
<b>Function</b>	[Isoform 1]: Catalyzes the transfer of a methyl group onto N-acetylserotonin, producing melatonin (N-acetyl-5-methoxytryptamine).

## Tissue Location

Expressed in the pineal gland (at protein level). In the retina, very low expression is found at the mRNA level (PubMed:7989373), and not at the protein level (PubMed:8574683)

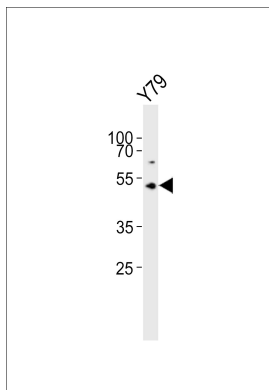
## Background

ASMT belongs to the methyltransferase superfamily, and is located in the pseudoautosomal region (PAR) at the end of the short arms of the X and Y chromosomes. The encoded enzyme catalyzes the final reaction in the synthesis of melatonin, and is abundant in the pineal gland.

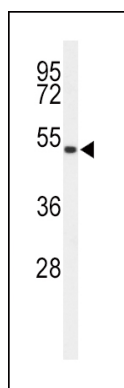
## References

- Melke, J., et al. *Mol. Psychiatry* 13(1):90-98(2008)  
Toma, C., et al. *Mol. Psychiatry* 12(11):977-979(2007)  
Ross, M.T., et al. *Nature* 434(7031):325-337(2005)  
Itoh, M.T., et al. *Horm. Metab. Res.* 35(3):153-157(2003)

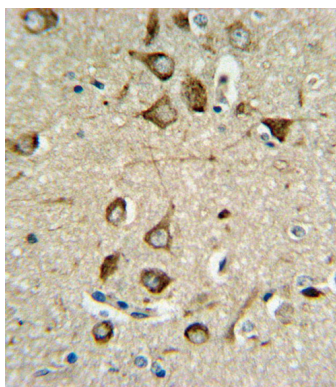
## Images



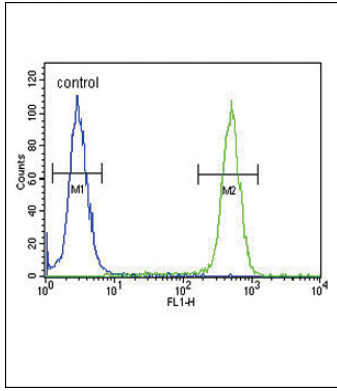
Western blot analysis of lysate from Y79 cell line, using ASMT Antibody (Center)(Cat. #AP4790c). AP4790c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



Western blot analysis of ASMT Antibody (Center) (Cat. #AP4790c) in 293 cell line lysates (35ug/lane). ASMT (arrow) was detected using the purified Pab.



ASMT Antibody (Center) (Cat. #AP4790c) IHC analysis in formalin fixed and paraffin embedded brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ASMT Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



ASMT Antibody (Center) (Cat. #AP4790c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## Citations

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- [Quiescent and proliferative fibroblasts exhibit differential p300 HAT activation through control of 5-methoxytryptophan production.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.