

### **ASMT Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP4790c

### **Specification**

## ASMT Antibody (Center) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	<u>P46597</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	38453
Antigen Region	212-241

## **ASMT Antibody (Center) - Additional Information**

Gene ID 438

Other Names Acetylserotonin O-methyltransferase, Hydroxyindole O-methyltransferase, HIOMT, ASMT

Target/Specificity

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.

**Dilution** WB~~1:500-1:1000 IHC-P~~1:10~50 FC~~1:10~50

Format

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.

Storage

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.

**Precautions** 

ASMT Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## ASMT Antibody (Center) - Protein Information

### Name ASMT

Function [Isoform 1]: Catalyzes the transfer of a methyl group onto N- acetylserotonin, producing



melatonin (N-acetyl-5-methoxytryptamine).

#### **Tissue Location**

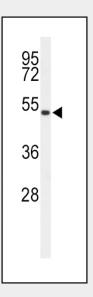
Expressed in the pineal gland (at protein level). In the retina, very low expression is found at the mRNA level (PubMed:7989373), and not at the protein level (PubMed:8574683)

### **ASMT Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

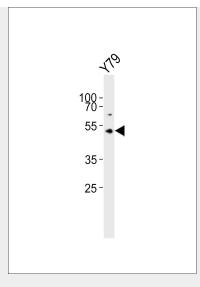
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## ASMT Antibody (Center) - Images

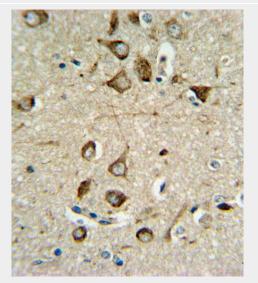


Western blot analysis of ASMT Antibody (Center) (Cat. #AP4790c) in 293 cell line lysates (35ug/lane). ASMT (arrow) was detected using the purified Pab.



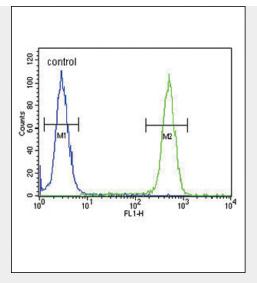


Western blot analysis of lysate from Y79 cell line, using ASMT Antibody (Center)(Cat. #AP4790c). AP4790c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



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.

# ASMT Antibody (Center) - 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.

# **ASMT Antibody (Center) - 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) **ASMT Antibody (Center) - Citations** 

• <u>Quiescent and proliferative fibroblasts exhibit differential p300 HAT activation through</u> <u>control of 5-methoxytryptophan production.</u>