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ASMT Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4790c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P46597
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23845
Calculated MW	38453
Antigen Region	212-241

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~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

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)

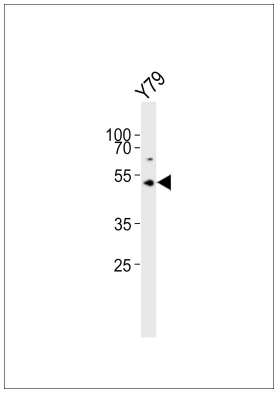
Background

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.

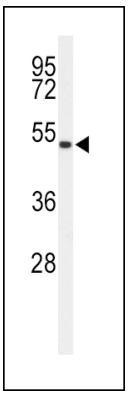
References

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)

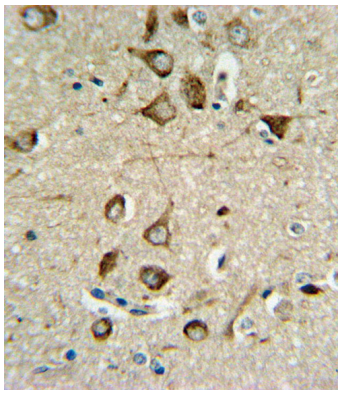
Images



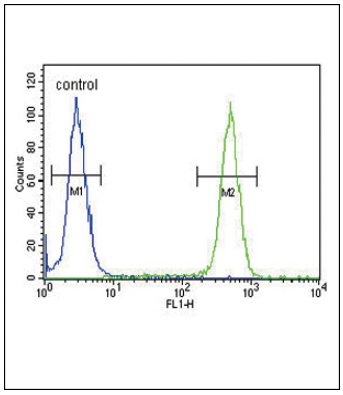
Western blot analysis of lysate from Y79 cell line, using ASMT Antibody (Center)(Cat. #AP4790c). AP4790c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 20ug.



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

- Quiescent and proliferative fibroblasts exhibit differential p300 HAT activation through control of 5-methoxytryptophan production.