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## ASMTL Antibody Blocking Peptide

Catalog Number: bs-9112P

Activity: Not tested

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

**Background:** Serotonin, a monoamine neurotransmitter associated with neuronal modulation of emotions, is synthesized by serotonergic neurons of the central nervous system through metabolism of the essential amino acid L-tryptophan. In the pineal gland, serotonin can be transformed into the circadian regulatory hormone melatonin by ASMT (acetylserotonin O-methyltransferase) which catalyzes the final reaction in the synthesis pathway. ASMTL (N-acetylserotonin O-methyltransferase-like protein) is a 621 amino acid protein with a putative catalytic S-adenosyl-L-methionine domain that shares high genetic homology to ASMT. The ASMTL protein is encoded by a gene from the PAR1 region of the X and Y chromosomes, which is considered to be a fusion product of two evolutionarily disparate genes. ASMTL, with potential cytoplasmic localization, is abundant in pancreas, placenta, fibroblast, thymus, prostate, testis, ovary and colon. Low expression levels are found in spleen, small intestine and leukocytes.