**Product Data Sheet**

**Product Name:** Catharanthine  
**CAS No.:** 2468-21-5  
**Cat. No.:** HY-N0252  
**MWt:** 336.43  
**Formula:** C21H24N2O2  
**Purity :** >98%  
**Solubility:** DMSO 5 mg/mL; Water <1 mg/mL.

**Mechanisms:** Pathways: Membrane Transporter/Ion Channel; Target: nAChR  
Pathways: Neuronal Signaling; Target: nAChR

**Biological Activity:**

Catharanthine inhibits nicotinic receptor mediated diaphragm contractions with IC50 of 59.6 μM. Target: nAChR  
Catharanthine evokes a concentration-dependent attenuation of carbachol responses in the rat ileum preparation, producing rightward curve displacements and decreases in maximal agonist responses. The mixture of serpentine, plus ajmalicine and catharanthine reveals a concentration-dependent inhibitory effect of acetylcholinesterase (AchE), with an IC50 at ca. 2.25 μg/mL [1]. Catharanthine can induce the self-association of tubulin into linear indefinite polymers with an efficacy that is 75% that of vinblastine or vincristine. Catharanthine binds to tubulin alpha-beta dimer with binding constant of 2.8 mM [2]. Catharanthine stimulates release of amylase from pancreatic fragments and to cause extensive degranulation of pancreatic acinar cells with accumulation of...

**References:**