# PRODUCT INFORMATION



# 2-PMAP

Item No. 21021

CAS Registry No.: 102212-26-0

Formal Name: 2-[(2-pyridinylmethyl)amino]-phenol

MF:  $C_{12}H_{12}N_2O$ FW: 200.2 **Purity:** 

 $\lambda_{max}$ : 245, 293 nm UV/Vis.: A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

## **Laboratory Procedures**

2-PMAP is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-PMAP in the solvent of choice. 2-PMAP is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of 2-PMAP in these solvents is approximately 30 mg/ml.

2-PMAP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2-PMAP should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 2-PMAP has a solubility of approximately 0.33 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

2-PMAP is an inhibitor of the production of amyloid precursor protein (APP) and amyloid- $\beta$  (A $\beta$ ) secretion.<sup>1</sup> It reduces levels of APP and its intracellular C-terminal fragments  $\alpha$ -CTF and  $\beta$ -CTF in CHO APP751SW cells when used at a concentration of 10  $\mu$ M. 2-PMAP also reduces secretion of A $\beta$  (1-40) and A $\beta$  (1-42) by 88.6 and 84.9%, respectively, in CHO APP751SW cells when used at a concentration of 50 μM without inducing cellular toxicity. In vivo, 2-PMAP reduces brain levels of full-length APP, α-CTF and β-CTF, and soluble A $\beta$  (1-40) and A $\beta$  (1-42) in the APP<sub>SW</sub>PS1<sub>dE9</sub> transgenic mouse model of Alzheimer's disease. It also improves novel object memory as well as spatial memory in the radial arm maze in APP<sub>SW</sub>PS1<sub>AFO</sub> transgenic mice.

#### Reference

1. Asuni, A.A., Guridi, M., Pankiewicz, J.E., et al. Modulation of APP expression reduces Aβ deposition in a mouse model. Ann. Neurol. 75(5), 684-699 (2014).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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