# PRODUCT INFORMATION



PAP-1

Item No. 30105

CAS Registry No.: 870653-45-5

4-(4-phenoxybutoxy)-7H-furo[3,2-g][1] Formal Name:

benzopyran-7-one

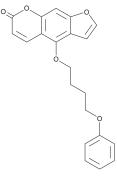
Synonym: 5-(4-Phenoxybutoxy)psoralen

MF:  $C_{21}H_{18}O_{5}$ 350.4 FW: ≥98% **Purity:** 

 $\lambda_{max}$ : 221, 249, 268, 309 nm UV/Vis.:

Supplied as: A solid Storage: -20°C Stability: ≥4 years

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



## **Laboratory Procedures**

PAP-1 is supplied as a solid. A stock solution may be made by dissolving the PAP-1 in the solvent of choice, which should be purged with an inert gas. PAP-1 is soluble in the organic solvent DMSO at a concentration of approximately 9 mg/ml.

### Description

PAP-1 is an inhibitor of  $K_v$ 1.3 voltage-gated potassium channels (EC $_{50}$  = 2 nM at -80 mV in cells overexpressing the human channel). It is selective for K<sub>v</sub>1.3 over a panel of 22 ion channels, including potassium, sodium, calcium, and chloride channels ( $EC_{50}s = 45-15,000 \text{ nM}$  for all). PAP-1 inhibits anti-CD3 antibody-induced proliferation of isolated human CCR7 effector memory T cells. *In vivo*, PAP-1 (3 mg/kg) inhibits ovalbumin-induced delayed-type hypersensitivity in rats.

### Reference

1. Schmitz, A., Sankaranarayanan, A., Azam, P., et al. Design of PAP-1, a selective small molecule Kv1.3 blocker, for the suppression of effector memory T cells in autoimmune diseases. Mol. Pharmacol. 68(5), 1254-1270 (2005).

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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