

Phenylbutyrate, Na Salt

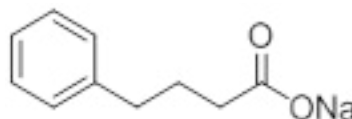
Catalog Number P007-1GM



ARBOR
ASSAYS

FEATURES

- HDAC inhibitor
- Differentiation inducer
- Increases production of fetal hemoglobin



INTRODUCTION

Histone deacetylase inhibitor that displays anticancer activity. Inhibits cell proliferation, invasion and migration and induces apoptosis in glioma cells. Also inhibits protein isoprenylation, depletes plasma glutamine, increases production of fetal hemoglobin through transcriptional activation of the γ -globin gene and affects hPPAR γ activation. Protects against cerebral ischemic injury and displays neuroprotective effect in a mouse model of Huntington's disease. Anti-neoplastic agent and transcriptional regulator. Also acts as an inducer of tumor cytostasis and differentiation.

FORM: White powder

MOLECULAR WEIGHT: 186.18

STORAGE: Room temperature

FORMULA: $C_{10}H_{11}O_2Na$

CAS NUMBER: 1716-12-7

OTHER NAMES: Sodium 4-phenylbutyrate, 4-Phenylbutyric acid sodium salt, SBP, 4-PB, 4PBA, PBNa

USES: Soluble to 24 mg/mL in DMSO and 25 mg/mL in water

REFERENCES:

Engelhard HH, Homer RJ, Duncan HA, Rozental J. Inhibitory effects of phenylbutyrate on the proliferation, morphology, migration and invasiveness of malignant glioma cells. *J.Neurooncol.*37:2, 97-108. (1998)

Appelskog IB, Ammerpohl O, Svechnikova IG, Lui WO, Almqvist PM, Ekström TJ., Histone deacetylase inhibitor 4-phenylbutyrate suppresses GADPH mRNA expression in glioma cells. *Int.J.Oncol.* 24:6, 1419-25. (2004)

Ammerpohl, O., et al. Complementary effects of HDAC inhibitor 4-PB on gap junction communication and cellular export mechanisms support restoration of chemosensitivity of PDAC cells. *Br.J.Cancer* 96:1, 73-81 (2007)