



## Product Information

**Product ID** P2815

**CAS No.** 1716-12-7

**Chemical Name** Benzenebutanoic acid, sodium salt

**Synonym** Buphenyl, Sodium 4-phenylbutyrate, Tributyrate

**Formula** C<sub>10</sub>H<sub>11</sub>O<sub>2</sub>Na

**Formula Wt.** 186.18

**Melting Point** 214-220 °C

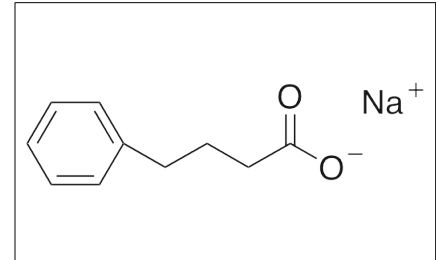
**Purity** ≥98%

**Solubility** Soluble in water, ethanol,  
DMSO.

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Phenylbutyrate is an inhibitor of histone deacetylase (HDAC) that exhibits neuroprotective and anticancer chemotherapeutic activities. In cellular and animal models of pancreatic cancer, phenylbutyrate inhibits cellular proliferation and tumor growth. This compound is clinically used to treat urea cycle disorders, as it allows excretion of excess nitrogen waste. In animal models of Alzheimer's disease, phenylbutyrate prevents neuronal loss and normalizes brain pathology.



**Bulk quantities available upon request**

Product ID	Size
P2815	1 g
P2815	5 g
P2815	25 g

**References** Cuadrado-Tejedor M, Ricobaraza AL, Torrijo R, et al. Phenylbutyrate is a multifaceted drug that exerts neuroprotective effects and reverses the Alzheimer's disease-like phenotype of a commonly used mouse model. *Curr Pharm Des.* 2013;19(28):5076-84. PMID: 23448463.

Dovzhanskiy DI, Hartwig W, Lázár NG, et al. Growth inhibition of pancreatic cancer by experimental treatment with 4-phenylbutyrate is associated with increased expression of Connexin 43. *Oncol Res.* 2012;20(2-3):103-11. PMID: 23193916.

Iannitti T, Palmieri B. Clinical and experimental applications of sodium phenylbutyrate. *Drugs R D.* 2011 Sep 1;11(3):227-49. PMID: 21902286.

Batshaw ML, MacArthur RB, Tuchman M. Alternative pathway therapy for urea cycle disorders: twenty years later. *J Pediatr.* 2001 Jan;138(1 Suppl):S46-54; Erratum in: *J Pediatr* 2002 Apr;140(4):490. PMID: 11148549.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.