

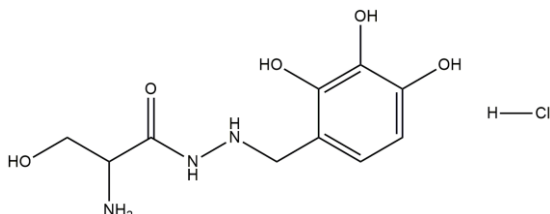
# Benserazide hydrochloride

12/19

**ALTERNATE NAMES:** DL-Serine 2-(2,3,4-Trihydroxybenzyl)hydrazide Hydrochloride; 2-amino-3-hydroxy-N'-(2,3,4-trihydroxybenzyl)propanehydrazide hydrochloride; 2-amino-3-hydroxy-N'-[(2,3,4-trihydroxyphenyl)methyl]propanehydrazide, hydrochloride

**CATALOG #:** B2963-100 100 mg  
B2963-500 500 mg

**STRUCTURE:**



**MOLECULAR FORMULA:** C<sub>10</sub>H<sub>16</sub>ClN<sub>3</sub>O<sub>5</sub>

**MOLECULAR WEIGHT:** 293.7

**CAS NUMBER:** 14919-77-8

**APPEARANCE:** A crystalline solid

**PURITY:** ≥95%

**SOLUBILITY:** ~16 mg/ml in DMSO  
~20 mg/ml in DMF

**DESCRIPTION:** Benserazide is an inhibitor of aromatic L-amino acid decarboxylase (AADC), an enzyme that has dopamine decarboxylase activity. It blocks the conversion of L-DOPA to dopamine by AADC in the peripheral circulatory system. It causes an increase in the amount of L-DOPA reaching the central nervous system and so reduces the required dose. It is often combined with L-DOPA in patients with Parkinson's disease.

**STORAGE TEMPERATURE:** -20°C. Protect from air. Store under desiccating conditions.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**REFERENCES:**

1. Soares-Da-Silva, P., Serrão, M.P., and Vieira-Coelho, M.A. Apical and basolateral uptake and intracellular fate of dopamine precursor L-dopa in LLC-PK1 cells. *Am.J.Physiol.* 274(2 Pt 2), F243-251 (1998).
2. Di Stefano, A., Dozio, P., and Cerasa, L.S. Antiparkinson prodrugs. *Molecules* 13(1), 46-68 (2008).
3. Shen, H., Kannari, K., Yamato, H., et al. Effects of benserazide on L-DOPA-derived extracellular dopamine levels and aromatic L-amino acid decarboxylase activity in the striatum of 6-hydroxydopamine-lesioned rats. *Tohoku J.Exp.Med.* 199(3), 149-159 (2003).

**RELATED PRODUCTS:**

Thioridazine Hydrochloride (Cat. No. B1581)  
 Chlorpromazine Hydrochloride (Cat. No. B1992)  
 Valbenazine (Cat. No. B2954)  
 Aripiprazole (Cat. No. B1186)  
 Bifepunox (Cat. No. B2921)

**DISCLAIMER:** *FOR RESEARCH USE ONLY! Not to be used on humans.*