**PRODUCT INFORMATION**

**Oxfenicine**  
*Item No. 33698*

**CAS Registry No.**: 32462-30-9  
**Formal Name**: αS-amino-4-hydroxy-benzeneacetic acid  
**Synonyms**: 4-hydroxy-L-Phenylglycine, p-hydroxy-L-Phenylglycine, UK 25842  
**MF**: C₈H₉NO₃  
**FW**: 167.2  
**Purity**: ≥95%  
**UV/Vis.**: λ<sub>max</sub>: 227 nm  
**Supplied as**: A crystalline solid  
**Storage**: -20°C  
**Stability**: ≥2 years

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

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**Laboratory Procedures**

Oxfenicine is supplied as a crystalline solid. A stock solution may be made by dissolving the oxfenicine in the solvent of choice, which should be purged with an inert gas. Oxfenicine is slightly soluble in DMSO.

Aqueous solutions of oxfenicine can be prepared by directly dissolving the crystalline solid in aqueous buffers. Oxfenicine is slightly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

**Description**

Oxfenicine is an inhibitor of carnitine palmitoyltransferase 1 (CPT1) and a prodrug form of 4-hydroxyphenylglyoxylic acid.¹,² Oxfenicine is transaminated to 4-hydroxyphenylglyoxylic acid by branched-chain amino acid aminotransferase in rat heart homogenates.³ It inhibits fatty acid oxidation and increases carbohydrate oxidation in isolated rat hearts perfused with palmitate (Item No. 10010279), glucose, and insulin.⁴ Oxfenicine increases the ex vivo activity of cardiac pyruvate dehydrogenase (PDH) in rats with an ED₅₀ value of 0.3 mmol/kg.¹ It reduces increases in plasma levels of lactate and lactate dehydrogenase 1 (LDH-1), markers of ischemic injury, in a dog model of microsphere-induced coronary ischemia when administered at a dose of 0.1 mmol/kg.⁵

**References**