

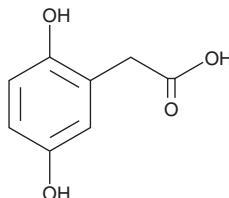
# PRODUCT INFORMATION



## Homogentisic Acid

Item No. 20045

**CAS Registry No.:** 451-13-8  
**Formal Name:** 2,5-dihydroxy-benzeneacetic acid  
**Synonyms:** Alcapton, NSC 88940, 2,5-dihydroxy- $\alpha$ -Toluic Acid  
**MF:**  $C_8H_8O_4$   
**FW:** 168.1  
**Purity:**  $\geq 95\%$   
**UV/Vis.:**  $\lambda_{max}$ : 296 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^\circ C$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Homogentisic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the homogentisic acid in the solvent of choice, which should be purged with an inert gas. Homogentisic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of homogentisic acid in ethanol and DMSO is approximately 16 mg/ml and approximately 25 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of homogentisic acid can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of homogentisic acid in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Homogentisic acid is a phenolic acid and intermediate in the catabolism of aromatic amino acids, including phenylalanine and tyrosine. It is formed in excess during alkaptonuria, whereas excess deposition of homogentisic acid in connective tissues produces ochronosis.<sup>1</sup>

### Reference

1. Mistry, J.B., Bukhari, M., and Taylor, A.M. Alkaptonuria. *Rare Dis.* **1:e27475**, (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

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