

## Homogentisic acid Datasheet

4<sup>th</sup> Edition (Revised in July, 2016)

### [ Product Information ]

**Name:** Homogentisic acid

**Catalog No.:** CFN93816

**Cas No.:** 451-13-8

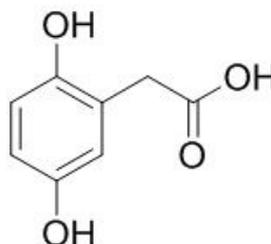
**Purity:** >=98%

**M.F:** C<sub>8</sub>H<sub>8</sub>O<sub>4</sub>

**M.W:** 168.15

**Physical Description:** Powder

**Synonyms:** 1,4-Hydroquinoneacetic acid;2,5-dihydroxy-benzeneaceticaci;  
Alcapton.



### [ Intended Use ]

1. Reference standards;
2. Pharmacological research;
3. Synthetic precursor compounds;
4. Intermediates & Fine Chemicals;
5. Others.

### [ Source ]

The herbs of *Arbutus unedo*.

### [ Biological Activity or Inhibitors ]

Homogentisic acid , the main phenolic compound from strawberry tree honey, shows interesting antioxidant and antiradical activities, and protective effect against thermal-cholesterol degradation, comparable to those of well known antioxidants.<sup>[1]</sup>

Homogentisic acid is the primary precursor of melanin synthesis in *Vibrio cholerae*, a *Hyphomonas* strain, and *Shewanella colwelliana*.<sup>[2]</sup>

A derivative of homogentisic acid which inhibits Pfnek-1 with an IC(50) around 1.8 µM, this product is moderately active in vitro against a FcB1 *P. falciparum* strain (IC(50) = 12 µM).<sup>[3]</sup>

### **[ Solvent ]**

Chloroform, Dichloromethane, Ethyl Acetate, DMSO, Acetone, etc.

### **[ HPLC Method ]<sup>[4]</sup>**

Mobile phase: Methanol- 0.7 g/L solution of orthophosphoric acid=2:98 ;

Flow rate: 1.0 ml/min;

Column temperature: Room Temperature;

The wave length of determination: 290 nm.

### **[ Storage ]**

2-8°C, Protected from air and light, refrigerate or freeze.

### **[ References ]**

[1] Rosa A, Tuberoso C I G, Atzeri A, *et al. Food Chem.*, 2011, 129(3):1045-53.

[2] Kotob S I, Coon S L, Quintero E J, *et al. Appl. Environ. Microb.*, 1995, 61(4):1620-2.

[3] Lebouvier N, Jullian V, Desvignes I, *et al. Marine Drugs*, 2009, 7(4):640-53.

[4] Bory C, Bouliou R, Chantin C, *et al. Clin. Chem.*, 1989, 35(2):321-2.

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