

---

**Product Data Sheet**

---

Product Name: Glycolic acid-d2

Cat. No.: GC68415

**Chemical Properties**

Cas. No. 75502-10-2

Formula  $C_2H_2D_2O_3$ 

M.Wt 78.06

Solubility  $H_2O$  : 100 mg/mL (1281.07 mM; Need ultrasonic); DMSO : Store  
100 mg/mL (1281.07 mM; Need ultrasonic); DMSO :  $\geq 100$  Storage at -  
mg/mL (1281.07 mM) 20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Evaluation sample solution : ship with blue ice All other available size: ship  
Condition with RT , or blue ice upon request.

Structure **Background**

Glycolic acid-d2 is the deuterium labeled Glycolic acid. Glycolic acid is an inhibitor of **Tyrosinase**, suppressing melanin formation and lead to a lightening of skin colour.

Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs<sup>[1]</sup>.

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

[2]. Usuki A, et al. The inhibitory effect of glycolic acid and lactic acid on melanin synthesis in melanoma cells. *Exp Dermatol.* 2003;12 Suppl 2:43-50.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA