Product Data Sheet

Product Name: Glycolic acid
Cat. No.: GC31549

Chemical Properties

Cas. No.	79-14-1		
SMILES	O=C(O)CO		
Formula	$C_2H_4O_3$	M.Wt	76.05
Solubility	DMSO : ≥ 100 mg/mL (1314.92 mM)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	Glycolic acid		

Protocol

Cell experiment:

HM3KO pigmented human melanoma cells and B16 mouse melanoma cells are cultured in Dulbecco’s modified Eagles medium supplemented with 10%fetal calf serum and appropriate amounts of antibiotics and fungizone were dissolved at a concentration of 100mg/mL in distilled water. These chemicals (e.g., Glycolic Acid) are added to the cell cultures at final concentrations of 300 or 500 mg/mL every 2 days for 5 days[1].

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References:

[1]. 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.

Background

Glycolic acid (dicarbonous acid, hydroxyacetic acid, hydroacetic acid) is the smallest alpha-hydroxy acid. Due to its excellent capability to penetrate skin, glycolic acid is often used in skin care products, most often as a chemical peel. Glycolic acid is an inhibitor of tyrosinase, suppressing melanin formation and lead to a lightening of skin colour.