
Product Data Sheet

Product Name: Melanin
Cat. No.: GC30652

Chemical Properties

Cas. No. 8049-97-6

SMILES [Melanin]

Formula $C_{18}H_{10}N_2O_4$ M.Wt 318.28

Solubility DMSO : < 1 mg/mL (insoluble or slightly soluble); H₂O : < 0.1 mg/mL (insoluble) Storage Store at -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 Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure

Background

Melanin is a unique pigment with myriad functions. It is multifunctional, providing defense against environmental stresses such as ultraviolet (UV) light, oxidizing agents and ionizing radiation.

Melanin contributes to the ability of fungi to survive in harsh environments. In addition, it plays a role in fungal pathogenesis. Melanin is an amorphous polymer that is produced by one of two synthetic pathways. Fungi may synthesize melanin from endogenous substrate via a 1,8-dihydroxynaphthalene (DHN) intermediate. Alternatively, some fungi produce melanin from L-3,4-dihydroxyphenylalanine (L-dopa)[1].

[1]. Eisenman HC, et al. Synthesis and assembly of fungal melanin. Appl Microbiol Biotechnol. 2012 Feb;93(3):931-40.

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

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