

Melanin

Cat. No.:	HY-113485		
CAS No.:	8049-97-6		
Target:	Endogenous Metabolite		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month

Melanin

SOLVENT & SOLUBILITY

In Vitro	<p>H₂O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)</p> <p>DMSO : < 1 mg/mL (ultrasonic;warming;heat to 80°C) (insoluble or slightly soluble)</p>
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2 mg/mL (Infinity mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2 mg/mL (Infinity mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2 mg/mL (Infinity mM); Clear solution

BIOLOGICAL ACTIVITY

Description	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.
IC ₅₀ & Target	Human Endogenous Metabolite
In Vitro	<p>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].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

CUSTOMER VALIDATION

- Pharmaceuticals. 2023 May 19, 16(5), 767.

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REFERENCES

[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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