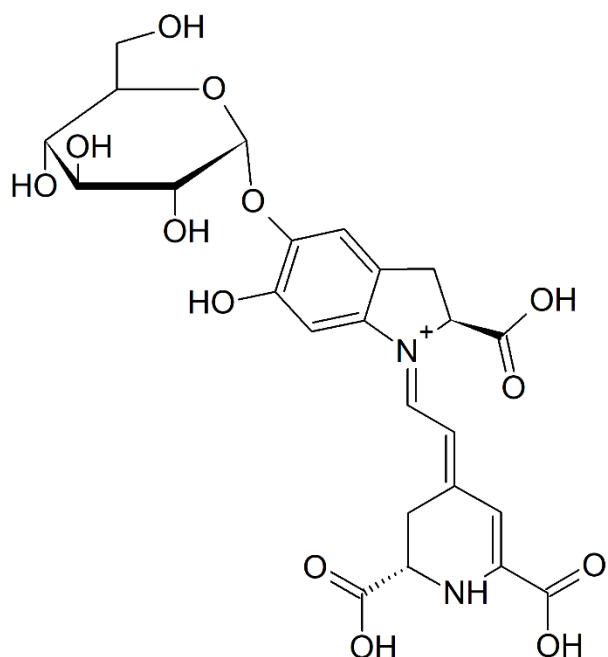


Product Betanin #1000



Product Description

Betanin standard stabilized with 50 μ M sodium ascorbate, solubilized in water stored in an amber vial, purity >98 % by HPLC analysis. Only for research use.

Catalogue Number: #1000

Chemical Name: Betanin

NSC: 170989

CAS Number: 7659-95-2

PubChem CID: 12300103

Synonyms

-(2S)-4-[2-[(2S)-2-Carboxy-5-(β-D-glucopyranosyloxy)-2,3-dihydro-6-hydroxy-1H-indol-1-yl]ethenyl]-2,3-dihydro-2,6-pyridinedicarboxylic Acid

-(15S)-Betanin; Betanidin 5-β-D-glucopyranoside

-Betanine

-Phytolaccanin

-[S-(R*,R*)]-4-[2-[2-Carboxy-5-(β-D-glucopyranosyloxy)-2,3-dihydro-6-hydroxy-1H-indol-1-yl]ethenyl]-2,3-dihydro-2,6-Pyridinedicarboxylic Acid

-2-Carboxy-1-[2-(2,6-dicarboxy-2,3-dihydro-4(1H)-pyridylidene)ethylidene]-5-(β-D-glucopyranosyloxy)-6-hydroxyindolinium Hydroxide Inner Salt

Molecular Formula: C₂₄H₂₆N₂O₁₃

Smiles:

C1C(NC(=CC1=CC=[N+]2C(CC3=CC(=C(C=C32)O)OC4C(C(C(C(O4)CO)O)O)O)C(=O)[O-])C(=O)O)C(=O)O

Appearance: Pink to Purple liquid

Molecular Weight: 550.47 g/mol

Purity: > 98 %

Solubility: DMSO, Water

Storage: -20 °C

Molar absorption coefficient at 536 nm: 65000 (M cm)⁻¹ (PMID: **20467875**)

Category: Standards; Dyes; phytochemicals, Pharmaceutical, Metabolites

Main sources: Caryophyllales plants such as red beets (*Beta vulgaris*. L), red prickly pears fruits (*Opuntia ficus-indica* sp) red pitaya/ dragon fruits (*Hylocereus polyrhizus*)

Applications: Betanin is a red glycosidic molecule found in beets, food additive E162 in Europe and under Section 73.40 in Title 21 of the Code of Federal Regulations (CFR) stipulated by the Food and Drug Administration (FDA) in the United States

References: PMID: **23521423**, Encapsulation of the most potent antioxidant betalains in edible matrixes as powders of different colors.

PMID: **24518339**, Inactivation of lipoxygenase and cyclooxygenase by natural betalains and semi-synthetic analogues.

Quantity	Format	Price
1 mg	100 µL HPLC amber vial	345 €
2.5 mg	250 µL HPLC amber vial	595 €
5 mg	500 µL HPLC amber vial	1095 €
10 mg	1 mL HPLC amber vial	1995 €