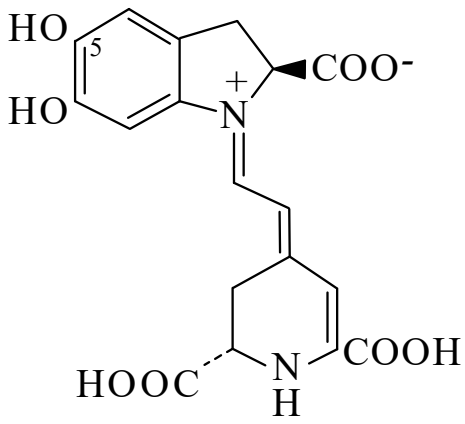
>>**Entry Name: Betanidin**
ENTRY UNDER REVIEW
Synonym(s): 2-Carboxy-1-[(2,6-dicarboxy-2,3-dihydro-4(1*H*)-pyridinylidene)ethylidene]-2,3-dihydro-5,6-dihydroxy-1*H*-indolium hydroxide inner salt



Absolute
configuration

CAS Registry Number: 2181-76-2

Molecular Formula: $C_{18}H_{16}N_2O_8$
Molecular Weight: 388.333
Accurate Mass: 388.090668
Percentage Composition: C 55.67%; H 4.15%; N 7.21%; O 32.96%
Biological Source: Aglycone from Betanin
Physical Description: Cryst. (as hydrochloride)
UV: [neutral] λ_{max} 271 (ε 8530); 295 (sh) (ε 7170); 544 (ε 51000) (no solvent reported) (hydrochloride)
Other Data: Forms cryst. K and NH_4 salts. Shows rapid *E/Z* isomerism in soln.

>>**Derivative:** 5-*O*-β-D-Glucopyranoside
Synonym(s): Betanin. Phytolaccanin. E 162

CAS Registry Number: 7659-95-2

Molecular Formula: $C_{24}H_{26}N_2O_{13}$
Molecular Weight: 550.475
Accurate Mass: 550.143493
Percentage Composition: C 52.37%; H 4.76%; N 5.09%; O 37.78%
Biological Source: Red pigment from beetroot, *Beta vulgaris* var. *rubra* and other Centrospermae
Use/Importance: Food dye. Chemotaxonomic marker for the Centrospermae

>>**Derivative:** 5-*O*-(3-*O*-Sulfo-β-D-glucopyranoside)
Synonym(s): Rivinianin

CAS Registry Number: 58115-21-2

Molecular Formula: $C_{24}H_{26}N_2O_{16}S$
Molecular Weight: 630.539
Accurate Mass: 630.100308
Percentage Composition: C 45.72%; H 4.16%; N 4.44%; O 40.60%; S 5.09%
Biological Source: Pigment from *Rivina humilis* (Phytolaccaceae)

>>**Derivative:** 5-*O*-(6-*O*-Sulfo-β-D-glucopyranoside)
Synonym(s): Prebetanin

CAS Registry Number: 13798-16-8

Molecular Formula: $C_{24}H_{26}N_2O_{16}S$
Molecular Weight: 630.539
Accurate Mass: 630.100308
Percentage Composition: C 45.72%; H 4.16%; N 4.44%; O 40.60%; S 5.09%
Biological Source: Pigment from beetroot *Beta vulgaris* (Chenopodiaceae)