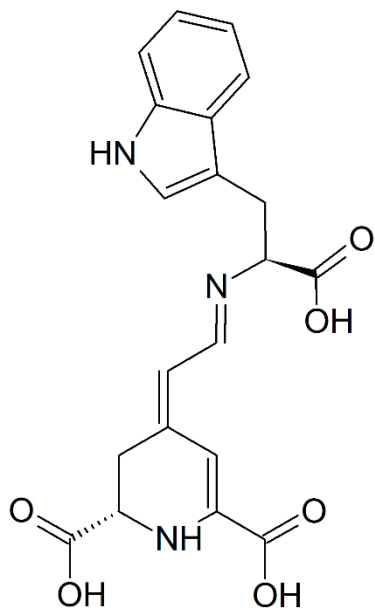


## Product Tryptophan-betaxanthin #2007



### Product Description

Tryptophan-betaxanthin standard stabilized with 50  $\mu$ M sodium ascorbate, solubilized in water stored in an amber vial, purity >98 % by HPLC analysis. Only for research use.

**Catalogue Number:** #2007

**Chemical Name:** Tryptophan-betaxanthin

**CAS Number:** Not available

**PubChem CID:** 136728070

### Synonyms

-(2S,4Z)-4-[2-[(1S)-1-carboxy-2-(1H-indol-3-yl)ethyl]iminoethylidene]-2,3-dihydro-1H-pyridine-2,6-dicarboxylic acid

-Tryptophan-betaxanthin

**Molecular Formula:** C<sub>20</sub>H<sub>19</sub>N<sub>3</sub>O<sub>6</sub>

**Smiles:** C1C(NC(=CC1=CC=NC(CC2=CNC3=CC=CC=C32)C(=O)O)C(=O)O)C(=O)O

**Appearance:** yellow to dark orange liquid

**Molecular Weight:** 397.4 g/mol

**Purity:** >98 %

**Solubility:** DMSO, Water

**Storage:** -20 °C

**Molar absorption coefficient at 480 nm:** 42000 (M cm)<sup>-1</sup> (obtained by *Betaelegans*)

**Category:** Standards; Dyes; phytochemicals, Pharmaceutical, Metabolites

**Main sources:** Is a minoritarian betaxanthin from Caryophyllales plants such yellow-orange prickly pears (*Opuntia sp*), *Celosia argentea var plumosa* and Swiss Chard (*Beta vulgaris ssp Cicla*)

**Applications:** Tryptophan-betaxanthin has been studied *in silico* as a potential Sirt1 (PMID **23075283**) and PPAR1 antagonist (PMID **22731403**).

**References:** PMID: **32707947**, Antitumoral Drug Potential of Tryptophan-Betaxanthin and Related Plant Betalains in the *Caenorhabditis elegans* Tumoral Model.

PMID: **32535316**, Betalain health-promoting effects after ingestion in *Caenorhabditis elegans* are mediated by DAF-16/FOXO and SKN-1/Nrf2 transcription factors.

Quantity	Format	Price
1 mg	100 µL HPLC amber vial	850 €
2.5 mg	250 µL HPLC amber vial	1595 €
5 mg	500 µL HPLC amber vial	2995 €
10 mg	1 mL HPLC amber vial	5750 €