

PRODUCT INFORMATION



Stercobilin (hydrochloride)

Item No. 36509

CAS Registry No.: 5370-34-3
Formal Name: (2R,3R,4S,16S,17R,18R)-3,18-diethyl-1,2,3,4,5,15,16,17,18,19,22,24-dodecahydro-2,7,13,17-tetramethyl-1,19-dioxo-21H-biline-8,12-dipropionic acid, hydrochloride

Synonyms: (-)-Stercobilin, L-Stercobilin

MF: C₃₃H₄₆N₄O₆ • HCl

FW: 594.8

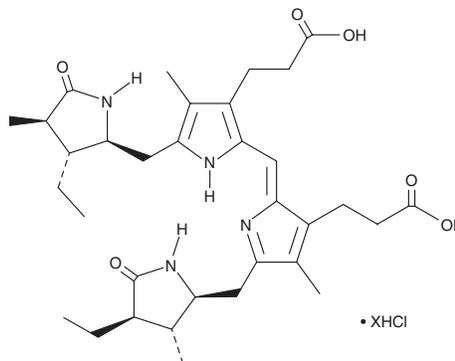
Purity: ≥95% (mixture of isomers)

UV/Vis.: λ_{max}: 488 nm

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Stercobilin (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the stercobilin (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Stercobilin (hydrochloride) is soluble in dimethyl formamide and sodium hydroxide (aq).

Description

Stercobilin is a fecal pigment and a metabolite of the heme catabolite bilirubin (Item No. 17161).¹ It induces DNA damage in a comet assay in HepG2 cells when used at concentrations ranging from 0.5 to 17 μM.² Stercobilin (20 and 30 μM) induces activation of NF-κB in a reporter assay and increases the expression of the genes encoding TNF-α, IL-1β, IL-6, inducible nitric oxide synthase (iNOS), and COX-2 in RAW 264.7 macrophages.³ Fecal and plasma levels of stercobilin are increased in *ob/ob* mice.

References

1. Vitek, L., Majer, F., Muchová, L., *et al.* Identification of bilirubin reduction products formed by *Clostridium perfringens* isolated from human neonatal fecal flora. *J. Chromatogr. B Analyt. Technol. Biomed. Life Sci.* **833(2)**, 149-157 (2006).
2. Mölzer, C., Pflieger, B., Putz, E., *et al.* *In vitro* DNA-damaging effects of intestinal and related tetrapyrroles in human cancer cells. *Exp. Cell Res.* **319(4)**, 536-545 (2013).
3. Sanada, S., Suzuki, T., Nagata, A., *et al.* Intestinal microbial metabolite stercobilin involvement in the chronic inflammation of *ob/ob* mice. *Sci. Rep.* **10(1)**, 6479 (2020).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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