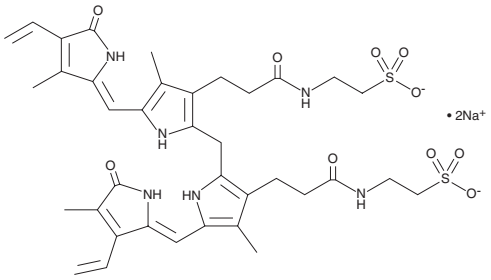
PRODUCT INFORMATION

Bilirubin Conjugate (sodium salt)

Item No. 17170

CAS Registry No.:	68683-34-1
Formal Name:	2,2'-[(2,17-diethenyl-1,10,11,19,22,23-hexahydro-3,7,13,18-tetramethyl-1,19-dioxo-21H-biline-8,12-diyl) bis[(1-oxo-3,1-propanediyl)imino]]bis-ethanesulfonic acid, disodium salt
Synonym:	Bilirubin Ditaurate
MF:	$C_{37}H_{44}N_6O_{10}S_2 \bullet 2Na$
FW:	842.9
Purity:	≥95%
UV/Vis.:	λ_{max}: 210, 452 nm
Supplied as:	A crystalline 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

Bilirubin conjugate (sodium salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the bilirubin conjugate (sodium salt) in the solvent of choice, which should be purged with an inert gas. Bilirubin conjugate (sodium salt) is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). It is also soluble in water. The solubility of bilirubin conjugate (sodium salt) in DMSO, DMF, and water is approximately 10, 0.25, and 5 mg/ml, respectively. We do not recommend storing the aqueous solution for more than one day.

Description

Bilirubin conjugate is a stable, water-soluble ditaurate derivative of bilirubin (Item No. 17161) meant to mimic endogenous bilirubin glucuronide derivatives. *In vivo*, bilirubin circulates in the plasma and is taken up by hepatocytes and conjugated to one or two glucuronic acids in a reaction catalyzed by UDP glucuronidase to form bilirubin mono or diglucuronide. This water-soluble form is then excreted from the liver in bile in the feces or is converted to urobilinogen and excreted in the urine. In addition to aiding in the disposal of heme, bilirubin and its conjugated derivatives have been shown to exhibit anti-oxidant and antimutagenic effects and to play a role in gut barrier function.[1,2]

References

1. Mölzer, C., Huber, H., Steyrer, A., *et al*. *In vitro* antioxidant capacity and antigenotoxic properties of protoporphyrin and structurally related tetrapyrroles. *Free Radic. Res.* **46(11)**, 1369-1377 (2012).
2. Zhou, K., Jiang, M., Liu, Y., *et al*. Effect of bile pigments on the compromised gut barrier function in a rat model of bile duct ligation. *PLoS One* **9(6)**, 1-8 (2014).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM