Silychristin

**Cat. No.:** HY-N0647  
**CAS No.:** 33889-69-9  
**Molecular Formula:** C_{25}H_{22}O_{10}  
**Molecular Weight:** 482.44  
**Target:** Others  
**Pathway:** Others  
**Storage:**  
- Powder: -20°C 3 years  
- 4°C: 2 years  
- In solvent: -80°C 6 months  
- -20°C: 1 month

**BIOLOGICAL ACTIVITY**

**Description**  
Silychristin is an abundant flavonolignan present in the fruits of *Silybum marianum*, with antioxidant properties. Silychristin is a potent inhibitor of the thyroid hormone transporter **MCT8**, and elicits a strong inhibition of T3 uptake with an **IC\textsubscript{50}** of 110 nM\textsuperscript{[1]}\textsuperscript{[2]}.  

**IC\textsubscript{50} & Target**  
**MCT8**\textsuperscript{[2]}

**In Vitro**  
Silychristin exhibits a strong inhibition of MCT8-mediated T3 uptake with an IC\textsubscript{50} of 110 nM in MCT8 overexpressing MDCK1-cells\textsuperscript{[2]}.  
Silychristin causes no cytotoxic for fibroblasts\textsuperscript{[3]}.  
Silychristin (6.5-75 μM; 24 hours) diminishes UVA toxicity and reduces ROS generation, and the protective effect is dose-dependent\textsuperscript{[3]}.  
Silychristin (12.5μM, 25μM) reduces the metalloproteinase-1 (MMP-1) level in cells\textsuperscript{[3]}.  

**Cell Viability Assay\textsuperscript{[3]}**  
**Cell Line:** NHDF  
**Concentration:** 6.5 μM, 12.5 μM, 25 μM, 50 μM, 75 μM  
**Incubation Time:** 24 hours  
**Result:** Diminished UVA toxicity and reduced ROS generation in dose-dependent.

**Cell Viability Assay \textsuperscript{[3]}**  
**Cell Line:** NHDF  
**Concentration:** 12.5 μM, 25 μM  
**Incubation Time:**  
**Result:** Reduced the metalloproteinase-1 (MMP-1) level in cells.
REFERENCES

