PRODUCT INFORMATION



β-Glucuronidase Inhibitor

Item No. 41228

CAS Registry No.: 484006-66-8

Formal Name: N-[(1,2-dihydro-6,8-dimethyl-2-oxo-3-

quinolinyl)methyl]-N'-(4-ethoxyphenyl)-N-

(2-hydroxyethyl)-thiourea

MF: $C_{23}H_{27}N_3O_3S$

425.5 FW: ≥98% **Purity:** 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

β-Glucuronidase inhibitor is supplied as a solid. A stock solution may be made by dissolving the β-glucuronidase inhibitor in the solvent of choice, which should be purged with an inert gas. β-Glucuronidase inhibitor is sparingly soluble (1-10 mg/ml) in DMSO.

Description

 β -Glucuronidase inhibitor is an inhibitor of bacterial β -glucuronidase (IC $_{50}$ = 283 nM for the E. coli enzyme). It inhibits wild-type but not Δ360-376 E. coli β-glucuronidase, a mutant lacking the bacteria-specific loop, when used at a concentration of 100 μM. In vivo, β-glucuronidase inhibitor (50 mg/kg) reduces colonic epithelial damage and the number of bloody diarrheal events induced by irinotecan (CPT-11) in a mouse model of chemotherapy-induced intestinal toxicity.

Reference

1. Wallace, B.D., Wang, H., Lane, K.T., et al. Alleviating cancer drug toxicity by inhibiting a bacterial enzyme. Science 330(6005), 831-835 (2010).

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

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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