

RITA, p53-MDM2 interaction inhibitor

Catalog	Unit
TBI3385-5MG	5 mg
TBI3385-25MG	25 mg

Product Details

Formal Name: 5,5'-(2,5-Furandiyl)bis-2-thiophenemethanol

Alternate Names: NSC 652287

Molecular Formula: C₁₄H₁₂O₃S₂

Formula Weight: 292.40

CAS Number: 213261-59-7

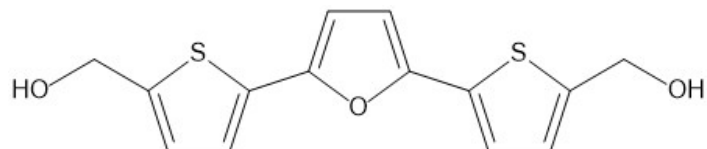
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 20 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

p53-MDM2 interaction inhibitor

Functions

RITA (reactivation of p53 and induction of tumor cell apoptosis) binds to p53 (K_d = 1.5 nM), changing its conformation, preventing it from binding to HDM2 and preventing its proteasomal degradation. It also weakly (computed K_d = 22 μM) binds HDM2 in the cleft that contacts the p53 transactivation domain. Its restoration of mutant p53 function depends on eIF2α phosphorylation, and it induces apoptosis via p53-dependent and -independent (JNK/SAPK/p38; protein translation) pathways. Induces senescence in head and neck cancer cells.

Application Procedures

First dissolved in DMSO (up to 20 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.