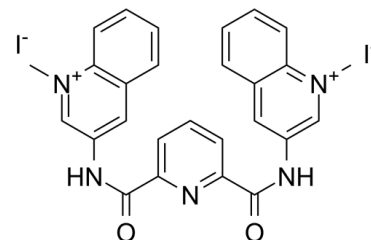


Data Sheet

Product Name:	360A (iodide)
Cat. No.:	CS-1560
CAS No.:	737763-37-0
Molecular Formula:	C ₂₇ H ₂₃ I ₂ N ₅ O ₂
Molecular Weight:	703.31
Target:	G-quadruplex; Telomerase
Pathway:	Cell Cycle/DNA Damage
Solubility:	DMSO : 2 mg/mL (2.84 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

360A iodide is a selective stabilizer of **G-quadruplex**, and also inhibits **telomerase** activity with an **IC₅₀** of 300 nM for telomerase in TRAP-G4 assay. IC₅₀ & Target: IC₅₀: 300 nM (Telomerase)^[1]

G-quadruplex^[1] **In Vitro**: 360A iodide inhibits telomerase activity and stabilizes G-quadruplex, with an **IC₅₀** of 300 nM for telomerase in TRAP-G4 assay. 360A reduces the viability of glioma cell lines, such as T98G, CB193, U118-MG, SAOS-2 and Primary astrocytes, with **IC₅₀s** of $4.8 \pm 1.1 \mu\text{M}$, $3.9 \pm 0.4 \mu\text{M}$, $8.4 \pm 0.5 \mu\text{M}$, $>15 \mu\text{M}$ and $17.4 \pm 1.2 \mu\text{M}$, respectively^[1]. 360A causes Rad51-dependent telomere aberrations preferentially involving the lagging strand telomeres, including telomere losses or telomere doublets, and induces DNA-PKcs-dependent sister telomere fusions^[2].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: 360A is dissolved in DMSO, and diluted before use^[1].^[1] The cell proliferation reagent WST-1 assay is performed. In brief, cells are seeded at various densities, depending on cell type ($0.25\text{--}4 \times 10^3$ cells/well in 100 μL complete medium), in 96-well culture plates and treated with various concentrations (**0.1–20 μM**) of **360A** or the corresponding concentrations of **DMSO** (control wells) for 3 or 7 days at 37°C in an atmosphere containing 5% CO₂. For 7-day assays, the medium is changed on day 3. Experiments are performed in triplicate^[1].

References:

[1]. Pennarun G, et al. Apoptosis related to telomere instability and cell cycle alterations in human glioma cells treated by new highly selective G-quadruplex ligands. *Oncogene*. 2005 Apr 21;24(18):2917–28.

[2]. Gauthier LR, et al. Rad51 and DNA-PKcs are involved in the generation of specific telomere aberrations induced by the quadruplex ligand 360A that impair mitotic cell progression and lead to cell death. *Cell Mol Life Sci*. 2012 Feb;69(4):629–40.

CAIndexNames:

Quinolinium, 3,3'-[(2,6-pyridinediyl)bis(carbonylylidenenitrilo)]bis[1-methyl-, iodide (1:2)

SMILES:

O=C(NC1=CC(C=CC=C2)=C2[N+](C)=C1)C3=CC=CC(C(NC4=C[N+](C)=C(C=CC=C5)C5=C4)=O)=N3.[I-].[I-]

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 732-484-9848 Fax: 888-484-5008 E-mail: sales@ChemScene.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA