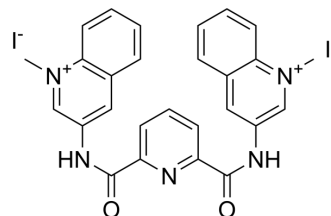


## 360A iodide

Cat. No.:	HY-15595A
CAS No.:	737763-37-0
Molecular Formula:	C <sub>27</sub> H <sub>23</sub> I <sub>2</sub> N <sub>5</sub> O <sub>2</sub>
Molecular Weight:	703.31
Target:	G-quadruplex; Telomerase
Pathway:	Cell Cycle/DNA Damage
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 2 mg/mL (2.84 mM; Need ultrasonic)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.4218 mL	7.1092 mL	14.2185 mL
	5 mM	---	---	---
	10 mM	---	---	---

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

360A iodide is a selective stabilizer of G-quadruplex, and also inhibits telomerase activity with an IC<sub>50</sub> of 300 nM for telomerase in TRAP-G4 assay.

#### IC<sub>50</sub> & Target

IC<sub>50</sub>: 300 nM (Telomerase)<sup>[1]</sup>  
G-quadruplex<sup>[1]</sup>

#### In Vitro

360A iodide inhibits telomerase activity and stabilizes G-quadruplex, with an IC<sub>50</sub> 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 IC<sub>50</sub>s of 4.8 ± 1.1 μM, 3.9 ± 0.4 μM, 8.4 ± 0.5 μM, >15 μM and 17.4 ± 1.2 μM, respectively<sup>[1]</sup>. 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<sup>[2]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### PROTOCOL

### Cell Assay <sup>[1]</sup>

The cell proliferation reagent WST-1 assay is performed. In brief, cells are seeded at various densities, depending on cell type ( $0.25-4 \times 10^3$  cells/well in 100  $\mu$ L complete medium), in 96-well culture plates and treated with various concentrations (0.1-20  $\mu$ M) of 360A or the corresponding concentrations of DMSO (control wells) for 3 or 7 days at 37°C in an atmosphere containing 5% CO<sub>2</sub>. For 7-day assays, the medium is changed on day 3. Experiments are performed in triplicate<sup>[1]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- Nucleic Acids Res. 2022 May 6;50(8):4574-4600.
- Cell Death Dis. 2021 Oct 25;12(11):999.

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### 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.

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

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