

Catalog # 10-4177 XI-011

CAS# 59474-01-0

(10-Methylanthracen-9-yl)methyl carbimidothioate hydrochloride; NSC146109 HCl Lot # FBS4059

XI-011 activates p53 by inhibiting expression of one of its negative regulators, MDM4 (MDMX).¹ It was able to induce apoptosis in MCF-7 breast cancer cells. XI-011 acted synergistically with cisplatin in inducing apoptosis in head and neck cancer cells.² It also induced apoptosis in several cervical cancer *in vitro* and *in vivo*.³ XI-011 displayed efficacy in treating lung fibrosis in an MDM4-dependent manner.⁴

- 1) Wang and Yan (2011), A small-molecule p53 activator induces apoptosis through inhibiting MDMX expression in breast cancer cells; Neoplasia 13 611
- 2) Roh et al. (2014), XI-011 enhances cisplatin-induced apoptosis by functional restoration of p53 in head and neck cancer; Apoptosis 19 1594
- 3) Zhang et al. (2022), A small-molecule inhibitor of MDMX suppresses cervical cancer cells via the inhibition of E6-E6AP-p53 axis; Pharmacol. Res. 177 106128
- 4) Mei et al. (2023), Pharmacological inhibition of MDM4 alleviates pulmonary fibrosis; Theranostics 13 2787

PHYSICAL DATA

Molecular Weight: 316.85

Solubility:

Molecular Formula: $C_{17}H_{16}N_2S \cdot HCI$ Purity: >98% by HPLC NMR: (Conforms)

DMSO (25 mg/ml)

Physical Description: Yellow solid

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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