

Catalog # 10-4090 TIC10

CAS# 1616632-77-9

7-Benzyl-4-(2-methylbenzyl)-1,2,6,7,8,9-hexahydroimidazo[1,2-a]pyrido[3,4-e]pyrimidin-5(4H)-one; ONC201 Lot # FBS2081

TIC10 (1616632-77-9) is novel anti-cancer compound that acts *via* early-stage integrated stress response activation leading to selective cancer cell death.¹⁻³ TIC10 potently activates mitochondrial caseinolytic protease P (ClpP) causing eIF2α-independent induction of ATF4 and Akt/ERK/Foxo3a/DR5/TRAIL-dependent apoptosis.⁴ Currently in clinical trials.

- 1) Allen et al. (2013) Dual Inactivation of Akt and ERK by TIC10 Signals Foxo3a Nuclear Translocation, TRAIL Gene Induction, and Potent Antitumor Effects, Sci. Transl. Med. 5 171ra17
- 2) Allen et al. (2015) Identification of TRAIL-inducing compounds highlights small molecule ONC201/TIC10 as a unique anticancer agent that activates the TRAIL pathway, Mol. Cancer. **14** 99
- 3) Allen et al. (2016) Discovery and Clinical Introduction of First-In-Class Imipridone ONC201, Oncotarget 7 74380
- 4) Ishizawa et al. (2019) Mitochondrial ClpP-Mediated Proteolysis Induces Selective Cancer Cell Lethality, Cancer Cell 35 721

PHYSICAL DATA

Molecular Weight: 386.49 Molecular Formula: $C_{24}H_{26}N_4O$ Purity: >98% (TLC)

Solubility: DMSO (25 mg/mL with warming)

Physical Description: Pale yellow solid

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

DMSO may be stored at -20°C for up to 2 months

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462 www.focusbiomolecules.com