

Catalog # 10-3935 E7820

CAS# 289483-69-8 N-(3-Cyano-4-methyl-1H-indol-7-yl)-3-cyanobenzenesulfonamide Lot # FBA9145

E7820 is an angiogenesis inhibitor that suppresses expression of integrins α2, α3, α5, and β1.1 Broad-spectrum antitumor and antiangiogenic effects are mainly mediated via integrin α2 suppression.² E7820 has been identified as a molecular glue that induces proteasomal degradation of the U2AF-related splicing factor CAPERa (RBM39) via CRL4DCAF15 mediated ubiquitination in human cancer cell lines.^{3,4} E7820 has also been shown to induce degradation of the aryl hydrocarbon receptor nuclear translator (ARNT), a protein essential in maintaining cellular homeostasis in response to environmental stress.5

- 1) Funahashi et al. (2002), Sulfonamide derivative, E7820, is a unique angiogenesis inhibitor suppressing an expression of integrin alpha2 subunit on endothelium; Cancer Res. 62 6116
- 2) Semba et al. (2004), An angiogenesis inhibitor E7820 shows broad-spectrum tumor growth inhibition in a xenograft graft: possible value of integrin alpha2 on platelets as a biological marker, Clin. Cancer Res. 10 1430
- 3) Uehara et al. (2017), Selective degradation of splicing factor CAPERα by anticancer sulfonamides; Nat. Chem. Biol. 13 675
- 4) Faust et al. (2020), Structural complementarity facilitates E7820-mediated degradation of RBM39 by DCAF15; Nat. Chem. Biol. 16 7
- 5) Kim et al. (2020), Aryl Sulfonamides Induce Degradation of Aryl Hydrocarbon Receptor Nuclear Translocator through CRL4DCAF15 E3 Ligase; Mol. Cells 43 935

PHYSICAL DATA

Molecular Weight:

336.37

Molecular Formula:

 $C_{17}H_{12}N_4O_2S$ 98% by HPLC

NMR: (Conforms)

Solubility:

Purity:

DMSO (>25 mg/ml)

Physical Description:

White 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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