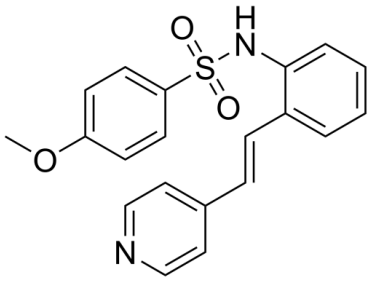
Data Sheet

Product Name:	HMN-154
Cat. No.:	CS-7522
CAS No.:	173528-92-2
Molecular Formula:	$C_{20}H_{18}N_2O_3S$
Molecular Weight:	366.43
Target:	Others
Pathway:	Others
Solubility:	DMSO : ≥ 15 mg/mL (40.94 mM)



BIOLOGICAL ACTIVITY:

HMN-154 is a novel benzenesulfonamide anticancer compound; inhibits KB and colon38 cells with **IC_{50}** values of 0.0026 and 0.003 μg/mL, respectively. IC50 & Target: IC50: 0.0026 μg/mL (KB cells), 0.003 μg/mL (colon38 cells)[1] ***In Vitro:*** HMN-154 interacts with NF-YB and thereby interrupts the binding of the NF-Y heterotrimer to DNA. NF-YB and thymosin β-10 are specific cellular binding proteins of HMN-154 and that this shared region is necessary for the binding to HMN-154. HMN-154 inhibits DNA binding of NF-Y to the human major histocompatibility complex class II human leukocyte antigen DRA Y-box sequence in a dose-dependent manner. HMN-154 shows very strong cytotoxicity against KB and colon38 cells with an IC_{50} value of 0.0026 and 0.003 μg/mL, respectively. HMN-154/BSA binds recombinant NF-YB or thymosin β-10 and the binding is inhibited by the addition of HMN-154 as the competitor. The binding between HMN-154 and NF-YB is specific and depends on its cytotoxicity[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: HMN-154 is solubilized in phosphate-buffered saline (PBS) containing 10% (v/v) of dimethyl sulfoxide (DMSO) to a concentration of 10 mM and stored at 4°C in the dark. Before each experiment each stock solution is diluted with PBS to the appropriate concentration for the experiment.[1]Cells are seeded into a 96-well microplate at a cell density of 10000/well. Drug is added on the next day, and the plate then is incubated for 72 h at 37°C. The growth inhibitory concentration is measured by 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyl tetrazolium bromide assay[1].

References:

[1]. Tanaka H, et al. Isolation of cDNAs encoding cellular drug-binding proteins using a novel expression cloning procedure: drug-western. Mol Pharmacol. 1999 Feb;55(2):356-63.

CAIndexNames:

Benzenesulfonamide, 4-methoxy-N-[2-[(1E)-2-(4-pyridinyl)ethenyl]phenyl]-

SMILES:

O=S(C1=CC=C(OC)C=C1)(NC2=CC=CC=C2/C=C/C3=CC=NC=C3)=O

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

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