

Product Data Sheet

Product Name: LS-170
Cat. No.: GC79153

Chemical Properties

Cas. No. 3099617-79-2

Formula $C_{34}H_{43}BrFN_5O_7S$ M.Wt 764.7

Solubility DMSO: 50 mg/mL (65.39 mM; Need ultrasonic) Storage Sealed storage, away from moisture

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

LS-170 is a YEATS2 YEATS domain inhibitor with an IC_{50} of 0.14 μ M. LS-170 displays selectivity for the YEATS2 YEATS domain over other YEATS domain family members and other epigenetic 'reader' and 'eraser' proteins. LS-170 reduces chromatin occupancy of the Ada-two-A-containing (ATAC)

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

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complex, decreases ATAC -dependent histone acetylation levels, and downregulates expression of ATAC -governed genes. LS-170 suppresses tumor growth in a lung cancer mouse model. LS-170 can be used for the research of non-small cell lung cancer [1].

In Vivo, Nanoparticles loaded with LS-170 (6 mg/kg; intravenous injection; once every 4 days; for 14 days) significantly inhibit tumor growth of non-small cell lung cancer in mice by suppressing the ATAC complex[1].

In Vitro, LS-170 (0.14 μ M) selectively inhibits the YEATS2 YEATS domain with an IC₅₀ of 0.14 μ M without affecting other YEATS domains or epigenetic reader/eraser proteins[1]. LS-170 (20 μ M; 24 h) selectively dissociates YEATS2 from chromatin in U2OS cells without affecting other YEATS domain proteins[1]. LS-170 (20 μ M) selectively targets the ATAC complex (YEATS2 and MBIP subunits) in H1299 cells[1]. LS-170 (20 μ M; 24 h) displaces YEATS2 from chromatin at ATAC-bound gene promoters in H1299 cells[1]. LS-170 reduces ATAC-dependent histone acetylation marks (H3K9ac, H3K14ac, H3K27ac) in H1299 cells without altering YEATS2 expression[1]. LS-170 (20 μ M; 24 h) downregulates ATAC-governed genes involved in DNA replication and cell cycle in H1299 cells[1]. LS-170 (72 h) inhibits the growth of NSCLC cell lines with GI50 values ranging from 6.8 μ M (H157) to 29.0 μ M (A549)[1]. LS-170 (20 μ M; 14 days) inhibits colony formation in H1299, A549, and PC9 NSCLC cells[1].

References:

[1]. Liu S, et al. Complex-specific inhibitors for interrogating ATAC histone acetyltransferase complex. Nat Chem Biol. Published online January 9, 2026.

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