Product Datasheet

ETN029

Catalog No. **BP-05335** · CAS **3066864-32-9** · Form **free base** · Physical state **solid** · Color **White to light yellow** · Version **1.0** · Revision **2026-11-16**

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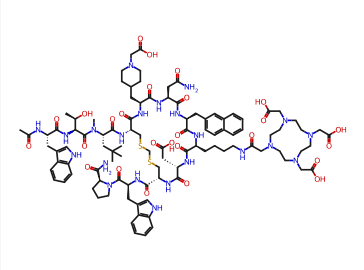
Target	Research area
Notch	**Cancer**

Molecular formula	$C_{101}H_{140}N_{22}O_{26}S_2$
Molecular weight	**2142.4540**

STRUCTURE



DESCRIPTION

ETN029 (MC339) is a selective DLL3 ligand. ETN029 labeled with 225Ac has dose-dependent cytotoxicity in SCLC, NEPC and metastatic melanoma cells and increases the phosphorylation of H2AX expression. ETN029 labeled with 177Lu shows rapid uptake persistent tumor retention and favorable tumor-to-kidney ratio. ETN029 can be used for cancers like SCLC and NEPC imaging and research.

BIOLOGICAL ACTIVITY

In Vitro

ETN029 (MC339) binds human DLL3 with picomolar affinity and specificity, showing high cell binding and internalization in both SHP-77 and transgenic CT26.DLL3 cell lines, with minimal binding to DLL3-negative CT26.WT controls[3].

[225Ac]Ac-ETN029 exhibits dose-dependent cytotoxicity in SCLC, NEPC, and metastatic melanoma cell lines and increases the phosphorylation of H2AX, a marker for DNA double-strand breaks[3].

In Vivo

A biodistribution study of [177Lu]Lu-ETN029 (MC339) in a SHP-77 cell-derived xenograft (CDX) mouse model showed that radionuclide distribution occurred primarily to the tumor with rapid uptake and persistent tumor retention throughout the study. Among normal tissues, the kidneys showed the highest uptake, suggesting renal excretion as the major elimination pathway[3].

In CDX models (NCI-H69, SHP-77), a single dose of [225Ac]Ac-ETN029 (0.35-1.4 μCi) resulted in robust tumor regression and prolonged survival[3].

SOLUBILITY

Soluble in DMSO : 100 mg/mL

REFERENCES

[1]. A. Savinainen, et al. 1153P Preclinical characterization of MC339: A novel radiotherapeutic agent for DLL3 expressing cancers. Neuroendocrine tumours Volume 35, Supplement 2 S755 September 2024.

[2]. Ninatti G, et al. Radioligand Therapy in Cancer Management: A Global Perspective. Cancers (Basel). 2025;17(21):3412. Published 2025 Oct 23.

[3]. Ku SY, et al. Preclinical Activity of the DLL3-Targeted T-cell Engager MK-6070 in Neuroendocrine Prostate Cancer. Mol Cancer Ther. 2026;25(2):346-354.