

Data Sheet

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 Product Name
 : TAPI-2

 Cat. No.
 : PC-42086

 CAS No.
 : 187034-31-7

 Molecular Formula
 : C₁₉H₃₇N₅O₅

 Molecular Weight
 : 415.5276

Target : Matrix Metalloproteinase (MMP)

Solubility : DMSO: ≥ 22 mg/mL

HO NH

Biological Activity

TAPI-2 is a broad-spectrum inhibitor of **TNF-\alpha converting enzyme** (TACE, ADAM17), ADAMs, and other MMPs, inhibits ADAM8, 10, 12, and TACE with Ki values of 10, 3, 100, and 0.12 uM, respectively.

TAPI-2 inhibits PMA-induced shedding of cell surface proteins, such as TGF- α , β amyloid precursor protein, L-selectin, and IL-6 receptor α subunit in CHO cells with IC50 of 10 uM.

TAPI-2 reverses the malignant phenotype in a breast cancer cell line by preventing mobilization of the growth factors $TGF-\alpha$ and amphiregulin.

TAPI-2 binds to hmeprin with inhibition constants IC50 20±10 μ M for hmeprin β subunit and 1.5±0.27 nM for hmeprin α subunit.

TAPI-2 dramatically decreases the protein levels of NICD and its downstream target HES-1 in both HCP-1 and HT29 cells. TAPI-2 significantly decreases the CSC phenotype by -50% in treated CRC cell lines.

TAPI-2 is an ADAM17 inhibitor but not ADAM10 inhibitor.

References

Moss ML, et al. *Anal Biochem*. 2007 Jul 15;366(2):144-8.

Parvathy S, et al. **Biochem J**. 1997 Oct 1;327 (Pt 1):37-43.

Kenny PA, et al. *J Clin Invest*. 2007 Feb;117(2):337-45.

Fiorucci S, et al. Aliment Pharmacol Ther. 1998 Nov;12(11):1139-53.

Caution: Product has not been fully validated for medical applications. Lab Use Only!