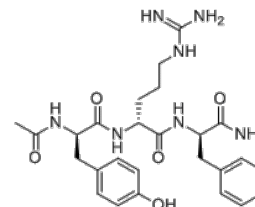


Product Name : DTP3
Cat. No. : PC-72696
CAS No. : 1809784-29-9
Molecular Formula : C₂₆H₃₅N₇O₅
Molecular Weight : 525.61
Target : MEK (MAP2K)
Solubility : 10 mM in DMSO



Biological Activity

DTP3 (MKK7 inhibitor DTP3) is a specific D-tripeptide that disrupts the GADD45β/**MKK7** complex (K_d=64.8 nM), kills MM cells effectively, and lacks toxicity to normal cells.

DTP3 bind to MKK7, but not to GADD45β, DTP3 dissociates the GADD45β/MKK7 complex via an allosteric mechanism, potentially involving a conformational rearrangement of the kinase.

DTP3 demonstrated potent and cancer-selective activity in MM cells from patients, effectively kills MM cells by inducing MKK7/JNK-dependent apoptosis, displayed synergistic activity with bortezomib in different MM cell lines, exhibiting a combination index of 0.21 in U266 cells and of 0.56 in KMS-12 cells.

DTP3 exhibited potent therapeutic activity against MM in vivo, in the absence of any apparent side effects.

References

Laura Tornatore, et al. **Cancer Cell**. 2014 Oct 13;26(4):495-508.

Laura Tornatore, et al. **Toxicol Rep**. 2019 Apr 19;6:369-379.

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

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