

Product Name : Tat-beclin 1
Cat. No. : PC-25236
CAS No. : 1423821-88-8
Molecular Formula : C₁₆₄H₂₅₁N₅₇O₄₅
Molecular Weight : 3741.10
Target : Autophagy
Solubility : 10 mM in DMSO

Tyr-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg
-Gly-Gly-Thr-Asn-Val-Phe-Asn-Ala-Thr-Phe-Glu
-Ile-Trp-His-Asp-Gly-Glu-Phe-Gly-Thr

Peptide Tat-beclin 1

Biological Activity

Tat-beclin 1 (Tat-BECN1, Tat-Beclin-1) is a potent, specific inducer of autophagy that interacts with negative regulator of autophagy GAPR-1 (also called GLIPR2).

Tat-beclin 1 binds the autophagy inhibitor GAPR-1.

Tat-beclin 1 decreases aggregates of a polyglutamine expansion protein and has anti-infective activity, decreases the intracellular survival of *L. monocytogenes* in primary murine bone-marrow-derived macrophages (BMDMs).

Tat-beclin 1 (0.5, 1, 2.5, and 5 μM) markedly inhibits HIV-1 replication in primary human MDMs.

Tat-beclin 1 induces autophagy and exerts antiviral activity in vivo.

Tat-Beclin 1 induces dose-dependent death that is blocked by pharmacological or genetic inhibition of autophagy, but not of apoptosis or necroptosis.

References

Shoji-Kawata S, et al. Nature. 2013 Feb 14;494(7436):201-6.

Liu Y, et al. Proc Natl Acad Sci U S A. 2013 Dec 17;110(51):20364-71.

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

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