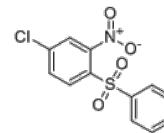


Product Name : BTB-1
Cat. No. : PC-49285
CAS No. : 86030-08-2
Molecular Formula : C₁₂H₈ClNO₄S
Molecular Weight : 297.72
Target : Kinesin
Solubility : 10 mM in DMSO



Biological Activity

BTB-1 (KIF18A inhibitor BTB-1) is a selective and ATP-competitive **mitotic kinesin KIF18A** inhibitor, BTB-1 potently inhibits the ATPase activity of Kif18A with IC₅₀ of 1.69 μM, does not inhibit other mitotic kinesins.

BTB-1 decreased the expression of viral RNAs and proteins, and the production of infectious viral particles, while overexpression of KIF18A enhanced the replication of influenza A virus (IAV).

BTB-1 treatment attenuated the activation of AKT, p38 MAPK, SAPK and Ran-binding protein 3 (RanBP3), which led to the prevention of the nuclear export of viral ribonucleoprotein complexes.

BTB-1 greatly improved the viability of IAV-infected mice.

BTB-1 treatment strongly inhibited the differentiation of mouse bone marrow (BM) cells into dendritic cells (DCs) in a dose-dependent manner.

Treatment of immature DCs with BTB-1 significantly impaired the expression of activation markers on DCs including MHC class I, CD80, and CD86 upon TLR4 or TLR7 treatment.

References

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

E-mail: tech@probechem.com