

Cyclic Pifithrin-Alpha Hydrobromide

Catalog Number :5118819

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Cyclic Pifithrin-alpha, 2-(4-Methylphenyl)imidazo[2,1-b]-5,6,7,8-tetrahydrobenzothiazole, HBr, Pifithrin-beta hydrobromide

Chemical Name: 2-(4-methylphenyl)-5,6,7,8-tetrahydroimidazo[2,1-b][1,3]benzothiazole;hydrobromide

Molecular Formula: C₁₆H₁₆N₂S HBr

Molecular Weight: 349.3

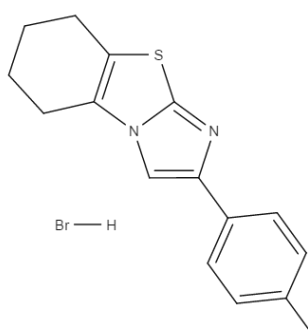
CAS Number: 511296-88-1

Purity: ≥95%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Cyclic Pifithrin-alpha is a reversible and cell-permeable inhibitor of p53, which plays a crucial role in apoptosis, angiogenesis, and genomic stability. The cyclic form is the more stable and less cytotoxic version of the molecule. It is reported to be capable of increasing the efficiency of inducing pluripotent stem cells.

Preparation & Storage

Soluble in organic solvents such as ethanol or DMSO.

References

1. Liao, J., Marumoto, T., Yamaguchi, S., Okano, S., Takeda, N., Sakamoto, C., ... Tani, K. (2013). Inhibition of PTEN tumor suppressor promotes the generation of induced pluripotent stem cells.; *Molecular Therapy*; 21(6), 1242-1250.
2. Zuco, V., Zunino, F. (2008). Cyclic pifithrin-α sensitizes wild type p53 tumor cells to antimicrotubule agent; induced apoptosis.; *Neoplasia*; 10(6), 587-596.
3. Pietrancosta, N., Maina, F., Dono, R., Moumen, A., Garino, C., Laras, Y., ... Kraus, J. L. (2005). Novel cyclized Pifithrin-α p53 inactivators: synthesis and biological studies.; *Bioorganic medicinal chemistry letters*; 15(6), 1561-1564.