

(Z)-4-Hydroxytamoxifen

Catalog Number :6800637

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

Product Information

Synonyms: 4OH-tamoxifen, (Z)-4-hydroxy Tamoxifen, Afimoxifene, OHTAM

Chemical Name: 4-[(Z)-1-[4-[2-(dimethylamino)ethoxy]phenyl]-2-phenylbut-1-enyl]phenol

Molecular Formula: C₂₆H₂₉NO₂

Molecular Weight: 387.5

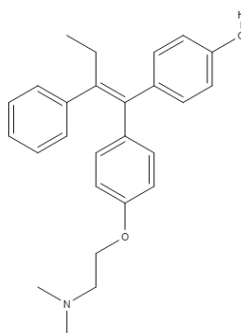
CAS Number: 68047-06-3

Purity: ≥98%

Applications: FA

Formulation: Crystalline solid

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



Description

Tamoxifen is a modulator of the of the estrogen receptor, with tissue specific agonistic and antagonistic effects. (Z)-4-Hydroxytamoxifen is a Tamoxifen metabolite with increased potency and a 100x higher affinity for the estrogen receptors. It is also reported to inhibit lipid peroxidation and can be used to activate intein-linked or estrogen receptor ERT2 domain fused Cas9 to reduce off target effects in CRISPR-mediated gene editing.

Preparation & Storage

Soluble in organic solvents such as ethanol or DMSO. Ethanol up to 20mg/ml.

References

1. Smith, C. L., Nawaz, Z., O'Malley, B. W. (1997). Coactivator and corepressor regulation of the agonist/antagonist activity of the mixed antiestrogen, 4-hydroxytamoxifen.; *Molecular endocrinology.*;11(6), 657-666.
2. Coward, P., Lee, D., Hull, M. V., Lehmann, J. M. (2001). 4-Hydroxytamoxifen binds to and deactivates the estrogen-related receptor γ . *Proceedings of the National Academy of Sciences.*;98(15), 8880-8884.
3. Vartak, S. V., Raghavan, S. C. (2015). Inhibition of nonhomologous end joining to increase the specificity of CRISPR/Cas9 genome editing.; *FEBS journal.*;282(22), 4289-4294.