Product Information

Tamoxifen

Powder, Suitable for cell culture

T2859

Product Description

Tamoxifen is a selective estrogen response modifier (SERM), protein kinase C inhibitor and anti-angiogenetic factor. Tamoxifen is a prodrug that is metabolized to active metabolites 4-hydroxytamoxifen (4-OHT) and endoxifen by cytochrome P450 isoforms CYP2D6 and CYP3A4. Tamoxifen blocks estradiol-stimulated VEGF production in breast tumor cells.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store this product at 2-8 °C.

Preparation Instructions

Tamoxifen is soluble in chloroform at 50 mg/mL and yields a clear, colorless to faint yellow solution. Stock solutions of Tamoxifen can also be prepared in DMSO at 10 mM. It is also soluble in methanol, ethanol, 2-propanol and propylene glycol. However, it is practically insoluble in water (solubility is <0.01%, 20 °C). DMSO solutions are stable when stored at -20 °C in the dark. Solutions are sensitive to UV light.

Activity

Tamoxifen has been used to facilitate the recombination of ect2flox allele in mouse organs. It has also been used to study its effect on lipopolysaccharide (LPS)-induced microglial activation.

Tamoxifen is a protein kinase C inhibitor. Induces apoptosis in human malignant glioma cell lines. Tamoxifen and its metabolite 4-hydroxytamoxifen are selective estrogen response modifiers (SERMs) that act as estrogen antagonists in mammary gland. Blocks estradiol-stimulated VEGF production in breast tumor cells.

References

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