

Product data sheet



MedKoo Cat#: 555964 Name: FLTX1 CAS: 1481401-71-1 Chemical Formula: C ₃₁ H ₂₈ N ₄ O ₄ Exact Mass: 520.2111 Molecular Weight: 520.589	
Product supplied as:	Powder
Purity (by HPLC):	≥ 98%
Shipping conditions	Ambient temperature
Storage conditions:	Powder: -20°C 3 years; 4°C 2 years. In solvent: -80°C 3 months; -20°C 2 weeks.

1. Product description:

FLTX1 is a fluorescent Tamoxifen derivative that can specifically label intracellular Tamoxifen-binding sites (estrogen receptors). FLTX1 allows the labeling of estrogen receptors in immunocytochemistry and immunohistochemistry studies, both under permeabilized and non-permeabilized conditions. FLTX1 showed the pharmacological activity of the tamoxifen moiety and efficient fluorescence properties, which could be used synergistically to improve the effect of the drug.

2. CoA, QC data, SDS, and handling instruction

SDS and handling instruction, CoA with copies of QC data (NMR, HPLC and MS analytical spectra) can be downloaded from the product web page under “QC And Documents” section. Note: copies of analytical spectra may not be available if the product is being supplied by MedKoo partners. Whether the product was made by MedKoo or provided by its partners, the quality is 100% guaranteed.

3. Solubility data

Solvent	Max Conc. mg/mL	Max Conc. mM
DMSO	25.0	48.02

4. Stock solution preparation table:

Concentration / Solvent Volume / Mass	1 mg	5 mg	10 mg
1 mM	1.92 mL	9.60 mL	19.21 mL
5 mM	0.38 mL	1.92 mL	3.84 mL
10 mM	0.19 mL	0.96 mL	1.92 mL
50 mM	0.04 mL	0.19 mL	0.38 mL

5. Molarity Calculator, Reconstitution Calculator, Dilution Calculator

Please refer the product web page under section of “Calculator”

6. Recommended literature which reported protocols for in vitro and in vivo study

In vitro study

Marrero-Alonso J, Morales A, García Marrero B, Boto A, Marín R, Cury D, Gómez T, Fernández-Pérez L, Lahoz F, Díaz M. Unique SERM-like properties of the novel fluorescent tamoxifen derivative FLTX1. *Eur J Pharm Biopharm.* 2013 Nov;85(3 Pt B):898-910. doi: 10.1016/j.ejpb.2013.04.024. Epub 2013 May 31. PMID: 23727370.

In vivo study

Marrero-Alonso J, Morales A, García Marrero B, Boto A, Marín R, Cury D, Gómez T, Fernández-Pérez L, Lahoz F, Díaz M. Unique SERM-like properties of the novel fluorescent tamoxifen derivative FLTX1. *Eur J Pharm Biopharm.* 2013 Nov;85(3 Pt B):898-910. doi: 10.1016/j.ejpb.2013.04.024. Epub 2013 May 31. PMID: 23727370.

7. Bioactivity

Biological target:

FLTX1 is a fluorescent Tamoxifen derivative that can specifically label intracellular Tamoxifen-binding sites (estrogen receptors) under permeabilized and non-permeabilized conditions.

In vitro activity

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Ligand binding assays showed that FLTX1 exhibits similar affinity for ER than tamoxifen. FLTX1 exhibited antiestrogenic activity comparable to tamoxifen in MCF7 and T47D cells transfected with 3xERE-luciferase reporter.

Reference: Eur J Pharm Biopharm. 2013 Nov;85(3 Pt B):898-910. <https://pubmed.ncbi.nlm.nih.gov/23727370/>

In vivo activity

In the rat uterine model of estrogenicity/antiestrogenicity, FLTX1 displayed antagonistic activity comparable to tamoxifen at lower doses, and only estrogenic uterotrophy at the highest dose.

Reference: Eur J Pharm Biopharm. 2013 Nov;85(3 Pt B):898-910. <https://pubmed.ncbi.nlm.nih.gov/23727370/>

Note: The information listed here was extracted from literature. MedKoo has not independently retested and confirmed the accuracy of these methods. Customer should use it just for a reference only.