

## **DATA SHEET**

## **Product overview**

Name CELT-074 (cat n. DR-589-3)

Short description Potent and selective hD<sub>2</sub> dopamine receptor fluorescent antagonist.

Biological description It shows  $K_i = 1.06$  nM,  $K_i = 136.5$  nM and  $K_i = 152.7$  nM for  $D_2$ ,  $D_3$  and  $D_4$ 

dopamine receptors respectively in radioligand binding assay.

Biological action Modulation of hD<sub>2</sub> dopamine by orthosteric antagonism.

Quantity 10 μg

Purity > 95%

## **Properties**

Molecular Weight 1365.39

Source Synthetic

Appearance Purple solid

Formulation Solid

Excitation 589 nM

Emission 616 nM

Pharmacological validation The efficacy and potency of CELT-074 as a potent and selective hD<sub>2</sub>

ligand was confirmed by a radioligand binding assay.

## **Validated Applications**

Flow Cytometry CELT-074 has been validated in flow cytometry competition binding

assays using CHO-K1 cells expressing hD2 dopamine receptor. CELT-

074 fluorescent ligand was used at 30 nM concentration.

**Storing and Using product** 

Storage instructions -20 °C (protect from light).

Solubility overview Soluble in DMSO.

Stock solution Add 73  $\mu$ L of DMSO to obtain a 100  $\mu$ M stock solution. We recommend

not exceeding 1% of DMSO in the final assay solution.

Handling After thawing individual aliquots for use, we recommend briefly

sonicating the sample to ensure it is fully dissolved and the solution is homogeneous. We do not recommend using the product after

subjecting it to repetitive freeze-thaw cycles.

Shipping conditions The product, as a solid, is stable at ambient temperature for periods of

up to a few days and does not require shipping on ice/dry ice.

Important This product is for RESEARCH USE ONLY and is not intended for

therapeutic or diagnostic use. Not for human or veterinary use.