DATA SHEET

Product overview

Name	CELT-228 (cat n. ADOR-560-2)
Short description	Potent and selective hA_3 adenosine receptor fluorescent antagonist.
Biological description	It shows full selectivity for A_3 over A_1, A_{2A} and A_{2B} (only in the A_3 receptor it is possible to measure a K_i whose value is 52.7 nM) in a radioligand binding assay.
Biological action	Modulation of hA_3 adenosine by orthosteric antagonism.
Quantity	10 µg
Purity	> 95%

Properties

Molecular Weight	1294.53
Source	Synthetic
Appearance	Purple solid
Formulation	Solid
Excitation	560 nm
Emission	571 nm
Pharmacological validation	The efficacy and potency of CELT-228 as a selective fluorescent hA_3 adenosine receptor antagonist was confirmed by a radioligand binding assay.

Validated applications

Fluorescence polarization	CELT-228 has been validated in fluorescence polarization binding assays using membrane preparations from HeLa cells overexpressing hA_3 dopamine receptor. CELT-228 fluorescent ligand was used at 75 nM concentration.[1]
Live-imaging confocal microscopy	CELT-228 has been validated in confocal microscopy for the labelling of hA_3 adenosine receptors in HeLa cancer cells.

Storing and Using product

Storage instructions	-20 °C (protect from light).
Solubility overview	Soluble in DMSO.
Stock solution	Add 77 µL of DMSO to obtain a 100 µM 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.

References

[1]D. Miranda-Pastoriza, R. Bernárdez, J. Azuaje, R. Prieto-Díaz, M. Majellaro, A. V. Tamhankar, L. Koenekoop, A. González, C. Gioe-Gallo, A. Mallo-Abreu, J. Brea, M. I. Loza, A. García-Rey, X. García-Mera, H. Gutiérrez de Terán and E. Sotelo. ACS Medicinal Chemistry Letters. DOI: 10.1021/acsmedchemlett.1c00598.