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Product Information

Fluorescent Adenosine Receptor Antagonist (A-633-AN)

Catalog Number **SML0156** Storage Temperature –20 °C

Synonym: Xanthine Amine Congener (XAC)-derivative

Product Description

Molecular formula: C₅₀H₅₄BF₂N₉O₇S

Molecular weight: 973.89

This fluorescent ligand may be used for imaging of $A_1/A_{2A}/A_3$ adenosine receptors in cells. It has been validated as an antagonist at $A_1/A_{2A}/A_3$ adenosine receptors.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Dissolve 0.2 mg in 20.5 μL of DMSO to give a 10 mM stock solution.

Once reconstituted with DMSO, aliquot the solution and store at -20 °C.

Storage/Stability

The product, as supplied, is stable at ambient temperature for periods of up to a few days and does not require shipping on ice/dry ice.

Once received, protect from light and store at -20 °C.

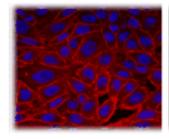
Procedure

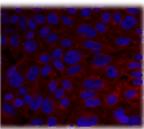
For imaging $A_1/A_{2A}/A_3$ adenosine receptors use ligand concentrations up to 100 nM. Excite the bound ligand using a 636 nm laser-line and use a 651 nm filter-set to observe fluorescent emission.

Results

Figure 1.

Adenosine Receptor Binding and Displacement of A-633-AN





Left – The A-633-AN ligand (30 nM) binding to live CHO cells expressing adenosine A1 receptors.

Right – Binding of the A-633-AN ligand blocked by the unlabeled competitor XAC (10 μ M).

Nuclei have been counterstained with Hoechst dye.

JB,PHC 07/12-1