

Product datasheet

NECA Fluorescent ligand (Red) ab118162

[4 Images](#)

Overview

Product name	NECA Fluorescent ligand (Red)
Description	Fluorescent non-selective adenosine agonist
Biological description	<p>Fluorescent adenosine agonist. Wide range of applications which include localizing receptor distribution in tissues and cells, and live-cell imaging of receptor kinetics. Stimulates phosphoinositide hydrolysis (pEC₅₀ = 7.34). In vitro potencies (pIC₅₀ values) are 8.47 and 8.57 for A₁ and A₃ respectively. pEC₅₀ values are 6.76 and 5.69 for A_{2A} and A_{2B} respectively.</p> <p>Excitation wavelength: 638 nm</p> <p>Emission wavelength: 657 nm</p>
Purity	> 97%

Properties

Pharmacophore	Adenosine-5'-N-ethyluronamide (NECA)-derivative
Selectivity	A ₁ : 8.47 A _{2A} : 6.76 A _{2B} : 5.69 A ₃ : 8.57
Excitation	638nm
Emission	657nm
Molecular weight	925.00
Molecular formula	C ₄₅ H ₅₁ BF ₂ N ₁₀ O ₇ S
CAS Number	774199-07-4
Storage instructions	Store at -20°C. Avoid exposure to light.
Handling	For ligand binding, fluorescence imaging and high content analysis, kinetic analysis and cell sorting at A ₁ / A _{2A} / A ₃ adenosine receptors use solutions up to 100 nM in DMSO.

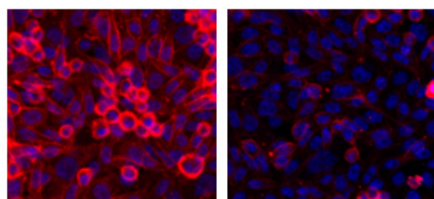
Applications

Our [Abpromise guarantee](#) covers the use of **ab118162** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

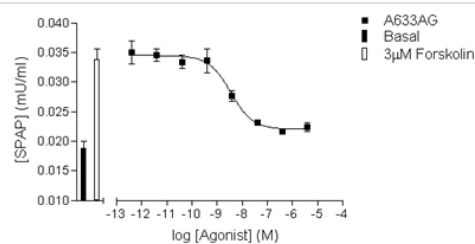
Application	Abreviews	Notes
Small Molecule Fluorescent Optical Detection		Use at an assay dependent concentration.
Receptor Localization		Use at an assay dependent concentration.
Fluorescent Cell Imaging		Use at an assay dependent concentration.

Images



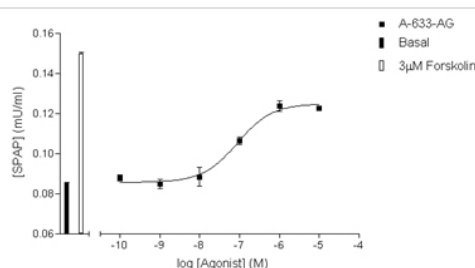
Receptor Localization - NECA Fluorescent ligand (Red) (ab118162)

Left: the ab118162 ligand (30 nM) binding to live CHO cells expressing adenosine A₃ receptors. Right: Binding blocked by the unlabelled competitor XAC (10 μM). Nuclei have been counter-stained with Hoechst.



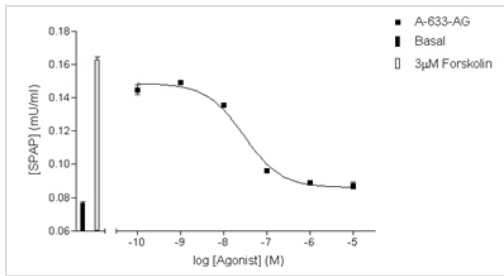
Small Molecule Fluorescent Optical Detection - NECA Fluorescent ligand (Red) (ab118162)

A₁-SPAP cells assayed with ab118162 (A-633-AG)



Small Molecule Fluorescent Optical Detection - NECA Fluorescent ligand (Red) (ab118162)

A_{2a}-SPAP cells assayed with ab118162 (A-633-AG)



A₃-SPAP cells assayed with ab118162 (A-633-AG)

Small Molecule Fluorescent Optical Detection -
NECA Fluorescent ligand (Red) (ab118162)

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