

## Product datasheet

# NECA Fluorescent ligand (Red) ab118162

4 Images

### Overview

<b>Product name</b>	NECA Fluorescent ligand (Red)
<b>Description</b>	Fluorescent non-selective adenosine agonist
<b>Biological description</b>	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 (pEC <sub>50</sub> = 7.34). In vitro potencies (pIC <sub>50</sub> values) are 8.47 and 8.57 for A <sub>1</sub> and A <sub>3</sub> respectively. pEC <sub>50</sub> values are 6.76 and 5.69 for A <sub>2A</sub> and A <sub>2B</sub> respectively. Excitation wavelength: 638 nm Emission wavelength: 657 nm
<b>Purity</b>	> 97%

### Properties

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

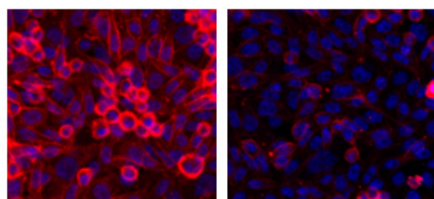
### Applications

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.

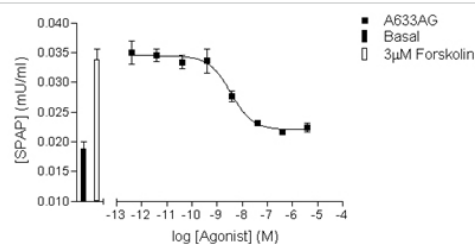
Application	Abreviews	Notes
Small Molecule Fluorescent Optical Detection		Use at an assay dependent concentration.
Receptor Localization		Use at an assay dependent concentration.
Fluorescent Cell Imaging		Use at an assay dependent concentration.

## Images



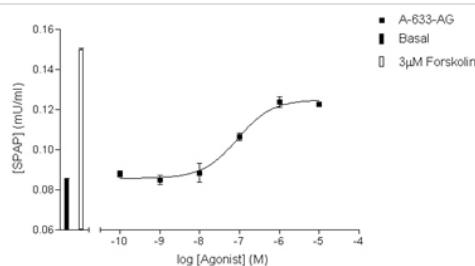
Receptor Localization - NECA Fluorescent ligand (Red) (ab118162)

Left: the ab118162 ligand (30 nM) binding to live CHO cells expressing adenosine A<sub>3</sub> receptors. Right: Binding blocked by the unlabelled competitor XAC (10 μM). Nuclei have been counter-stained with Hoechst.



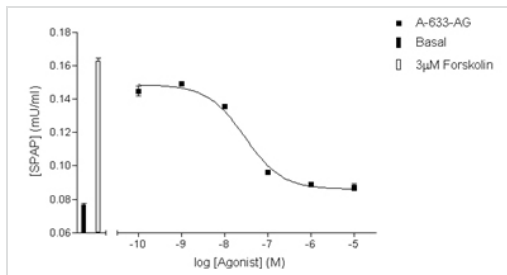
Small Molecule Fluorescent Optical Detection - NECA Fluorescent ligand (Red) (ab118162)

A<sub>1</sub>-SPAP cells assayed with ab118162 (A-633-AG)



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

A<sub>2a</sub>-SPAP cells assayed with ab118162 (A-633-AG)



A<sub>3</sub>-SPAP cells assayed with ab118162 (A-633-AG)

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

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE, NOT FOR USE IN HUMANS"

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