

Product datasheet

XAC Fluorescent ligand (Red) ab118164

画像数 4

製品の概要

<b>製品名</b>	XAC Fluorescent ligand (Red)
<b>製品の詳細</b>	Fluorescent A <sub>3</sub> antagonist
<b>生理活性の詳細</b>	<p>Fluorescent adenosine A<sub>3</sub> antagonist (pK<sub>D</sub> values are 6.57, 6.74 and 8.10 at A<sub>1</sub>, A<sub>2A</sub> and A<sub>3</sub> respectively). Wide range of applications which include localizing receptor distribution in tissues and cells, and live-cell imaging of receptor kinetics. Antagonizes the activity of NECA (<a href="#">ab120440</a>) in vitro.</p> <p>Excitation wavelength: 633 nm</p> <p>Emission wavelength: 650 nm</p>
<b>精製度</b>	> 97%

製品の特性

<b>ファーマコフォア</b>	Xanthine Amine Congener (XAC)-derivative
<b>選択性</b>	A <sub>1</sub> : 6.57   A <sub>2a</sub> : 6.74   A <sub>3</sub> : 8.10
<b>励起波長</b>	633nm
<b>蛍光波長</b>	650nm
<b>分子量</b>	1144.00
<b>分子式</b>	C <sub>58</sub> H <sub>68</sub> BF <sub>2</sub> N <sub>11</sub> O <sub>9</sub> S
<b>バリデーション情報</b>	<p>The cyclic AMP-induced expression of SPAP was measured under basal and forskolin-stimulated (maximal) conditions. Addition of ab118164 to the basal or forskolin-stimulated cells did not significantly alter basal and stimulated SPAP levels, demonstrating that ab118164 has no intrinsic agonist activity.</p> <p>To determine the apparent K<sub>D</sub> for ab118164, cells were treated with varying concentrations of NECA alone, or in the presence of 1 μM ab118164, and the cyclic AMP-induced expression of SPAP measured.</p> <p>The apparent K<sub>D</sub> at A<sub>1</sub>, A<sub>2A</sub> and A<sub>3</sub> receptors was calculated from the rightward shift of the agonist response curve in the presence of ab118164, compared to the response curve for the agonist alone, for each receptor-expressing cell line.</p>
<b>保存方法</b>	Store at -20°C. Avoid exposure to light.
<b>使用に関する注意</b>	For ligand binding, fluorescence imaging and high content analysis, kinetic analysis and cell sorting at adenosine A <sub>1</sub> / A <sub>2A</sub> / A <sub>3</sub> receptors use solutions up to 100 nM in DMSO.

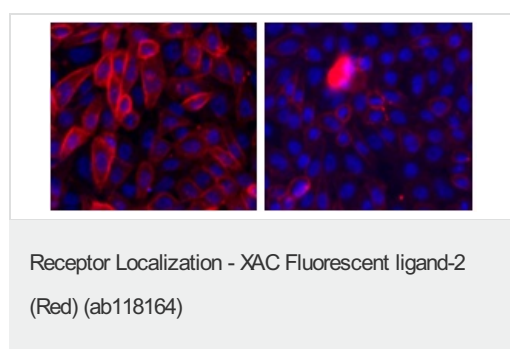
## アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab118164** in the following tested applications.

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

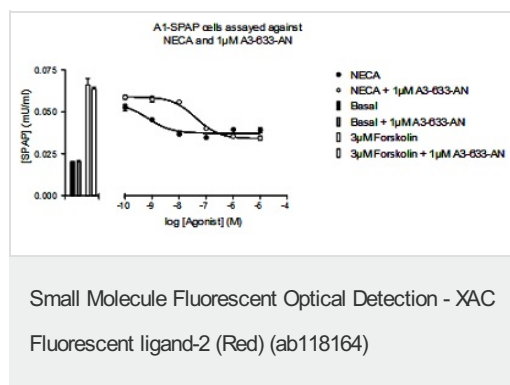
アプリケーション	Abreviews	特記事項
Small Molecule Fluorescent Optical Detection		Use at an assay dependent concentration.
Receptor Localization		Use at an assay dependent concentration.
Fluorescent Cell Imaging		Use at an assay dependent concentration.

## 画像



Left: ab118164 ligand (100 nM) binding to live CHO cells expressing adenosine A<sub>3</sub> receptors.

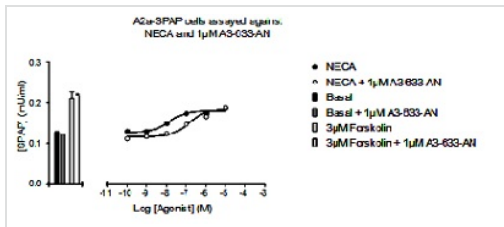
Right: Binding blocked by the unlabelled competitor XAC (10 μM). Nuclei have been counter-stained with Hoechst.



To determine the apparent K<sub>D</sub> for ab118164, cells were treated with varying concentrations of NECA alone, or in the presence of 1 μM ab118164, and the cyclic AMP-induced expression of SPAP measured.

The apparent K<sub>D</sub> at A<sub>1</sub> receptor was calculated from the rightward shift of the agonist response curve in the presence of ab118164, compared to the response curve for the agonist alone, for each receptor-expressing cell line.

Antagonist -log K<sub>D</sub> values for A<sub>1</sub> is 6.57.

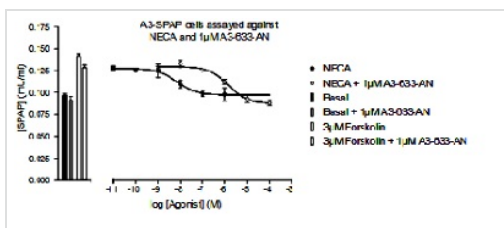


Small Molecule Fluorescent Optical Detection - XAC  
Fluorescent ligand-2 (Red) (ab118164)

To determine the apparent KD for ab118164, cells were treated with varying concentrations of NECA alone, or in the presence of 1 µM ab118164, and the cyclic AMP-induced expression of SPAP measured.

The apparent KD at A<sub>2A</sub> receptor was calculated from the rightward shift of the agonist response curve in the presence of ab118164, compared to the response curve for the agonist alone, for each receptor-expressing cell line.

the Antagonist -log KD values for A<sub>2A</sub> is 6.74.



Small Molecule Fluorescent Optical Detection - XAC  
Fluorescent ligand-2 (Red) (ab118164)

To determine the apparent KD for ab118164, cells were treated with varying concentrations of NECA alone, or in the presence of 1 µM ab118164, and the cyclic AMP-induced expression of SPAP measured.

The apparent KD at A<sub>3</sub> receptors was calculated from the rightward shift of the agonist response curve in the presence of ab118164, compared to the response curve for the agonist alone, for each receptor-expressing cell line.

The Antagonist -log KD value for A<sub>3</sub> is 8.1.

**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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