

Product datasheet

XAC Fluorescent ligand (Red) ab118164

画像数 4

製品の概要

製品名	XAC Fluorescent ligand (Red)
製品の詳細	Fluorescent A ₃ antagonist
生理活性の詳細	Fluorescent adenosine A ₃ antagonist (pK _D values are 6.57, 6.74 and 8.10 at A ₁ , A _{2A} and A ₃ 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 (ab120440) in vitro. Excitation wavelength: 633 nm Emission wavelength: 650 nm
精製度	> 97%

製品の特性

ファーマコフォア	Xanthine Amine Congener (XAC)-derivative
選択性	A ₁ : 6.57 A _{2a} : 6.74 A ₃ : 8.10
励起波長	633nm
蛍光波長	650nm
分子量	1144.00
分子式	C ₅₈ H ₆₈ BF ₂ N ₁₁ O ₉ S
バリデーション情報	<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_D 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_D at A₁, A_{2A} and A₃ 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>
保存方法	Store at -20°C. Avoid exposure to light.
使用に関する注意	For ligand binding, fluorescence imaging and high content analysis, kinetic analysis and cell sorting at adenosine A ₁ / A _{2A} / A ₃ receptors use solutions up to 100 nM in DMSO.

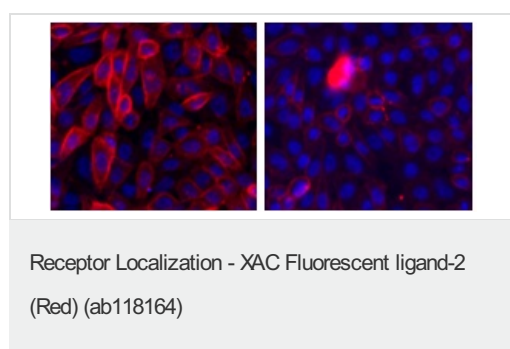
アプリケーション

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.

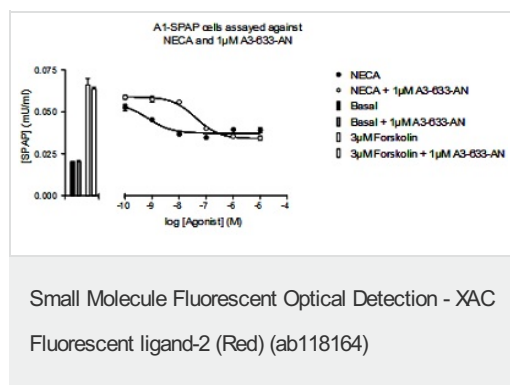
アプリケーション	Abreviews	特記事項
Small Molecule Fluorescent Optical Detection		Use at an assay dependent concentration.
Receptor Localization		Use at an assay dependent concentration.
Fluorescent Cell Imaging		Use at an assay dependent concentration.

画像



Left: ab118164 ligand (100 nM) binding to live CHO cells expressing adenosine A₃ receptors.

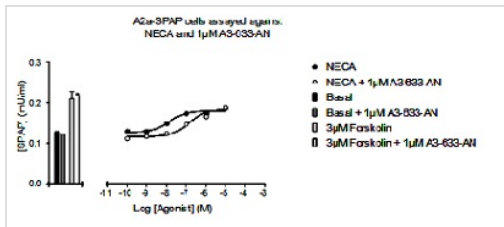
Right: Binding blocked by the unlabelled competitor XAC (10 μM). Nuclei have been counter-stained with Hoechst.



To determine the apparent K_D 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_D at A₁ 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_D values for A₁ is 6.57.

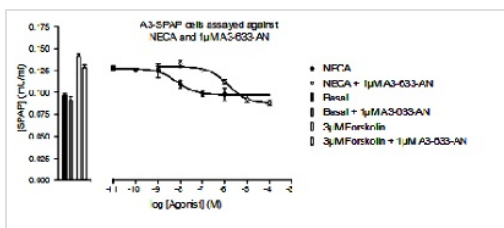


Small Molecule Fluorescent Optical Detection - XAC
Fluorescent ligand-2 (Red) (ab118164)

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_{2A} 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_{2A} 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 A₃ 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 A₃ is 8.1.

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