# **Certificate of Analysis**

# www.tocris.com

Print Date: Sep 23rd 2019

## Product Name: XAC

#### Catalog No.: 3200 Batch No.: 3

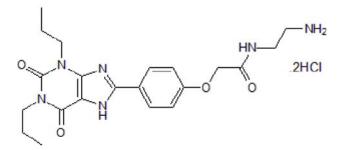
CAS Number: IUPAC Name:

N-(2-Aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1H-purin-8-yl)phenoxy]-acetamide dihydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula: Batch Molecular Weight: Physical Appearance:** Solubility: Storage: **Batch Molecular Structure:** 

C21H28N6O4.2HCI 501.41 White solid DMSO to 100 mM Desiccate at RT



### 2. ANALYTICAL DATA

HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis:

Shows 98.5% purity Consistent with structure Consistent with structure

Carbon Hydrogen Nitrogen Chlorine

Theoretical	50.3	6.03	16.76
Found	50.47	5.98	16.52

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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1962928-23-9

# TOCRIS a biotechne brand

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CAS Number: 1962928-23-9

IUPAC Name: N-(2-Aminoethyl)-2-[4-(2,3,6,7-tetrahydro-2,6-dioxo-1,3-dipropyl-1*H*-purin-8-yl)phenoxy]-acetamide dihydrochloride

### **Description:**

Adenosine receptor antagonist ( $IC_{50}$  values are 1.8 and 114 nM at  $A_1$  and  $A_2$  receptors respectively). Attenuates adenosine-induced vasodilation and exhibits proconvulsant activity in vivo.

#### Physical and Chemical Properties:

Batch Molecular Formula: C<sub>21</sub>H<sub>28</sub>N<sub>6</sub>O<sub>4</sub>.2HCl Batch Molecular Weight: 501.41 Physical Appearance: White solid

#### Minimum Purity: >98%

#### **Batch Molecular Structure:**

# NH2 NH2 NH2 2HCI NH2 2HCI

#### Storage: Desiccate at RT

Solubility & Usage Info: DMSO to 100 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

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Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Weiß and Grisshammer** (2002) Purification and characterization of the human adenosine A<sub>2A</sub> receptor functionally expressed in *Escherichia coli*. Eur.J.Biochem. **269** 82. PMID: 11784301.

**Sawmiller** *et al* (1994) Effects of xanthine amine congener on hypoxic coronary resistance and venous and epicardial adenosine concentrations. Cardiovasc.Res. **28** 604. PMID: 8025903.

**Morgan** *et al* (1989) Potent convulsant actions of the adenosine receptor antagonist, xanthine amine congener (XAC) Life Sci. **45** 719. PMID: 2779359.

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