# biotechne<sup>®</sup> TOCRIS

### Print Date: Jun 12th 2024

## **Certificate of Analysis**

## www.tocris.com

Batch No.: 2

Catalog No.: 7783

## Product Name: Upadacitinib

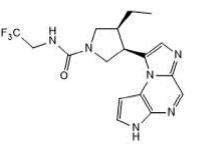
CAS Number: 1310726-60-3

IUPAC Name: (3S,4R)-3-Ethyl-4-(3H-imidazo[1,2-a]pyrrolo[2,3-e]pyrazin-8-yl)-N-(2,2,2-trifluoroethyl)-1-pyrrolidinecarboxamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: Batch Molecular Weight: Physical Appearance: Solubility:  $C_{17}H_{19}F_3N_6O.1/_4H_2O$ 384.87 Off White solid DMSO to 100 mM ethanol to 50 mM Store at -20°C

Storage: **Batch Molecular Structure:** 



## 2. ANALYTICAL DATA

HPLC: <sup>1</sup>H NMR: Mass Spectrum: Microanalysis: Shows 99.7% purity Consistent with structure Consistent with structure Carbon Hydrogen Nitrogen Theoretical 53.05 5.11 21.84 Found 52.41 5.2 21.23

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

bio-techne.com	North America	China	Europe Middle East Africa	Rest of World
info@bio-techne.com techsupport@bio-techne.com	Tel: (800) 343 7475	info.cn@bio-techne.com Tel: +86 (21) 52380373	Tel: +44 (0)1235 529449	www.tocris.com/distributors Tel:+1 612 379 2956

# biotechne TOCRIS

## **Product Information**

## www.tocris.com

2

## Product Name: Upadacitinib

CAS Number: 1310726-60-3

IUPAC Name: (3S,4R)-3-Ethyl-4-(3H-imidazo[1,2-a]pyrrolo[2,3-e]pyrazin-8-yl)-N-(2,2,2-trifluoroethyl)-1-pyrrolidinecarboxamide

### Description:

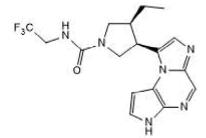
Upadacitinib is a potent and selective JAK1 inhibitor (IC<sub>50</sub> = 47 nM). In a cellular assay, Upadacitinib shows selectivity for JAK1 over JAK2, JAK3 and TYK2 (IC<sub>50</sub> values are 0.014  $\mu$ M, 0.593  $\mu$ M, 1860  $\mu$ M and 2715  $\mu$ M). In vivo, Upadacitinib suppresses paw swelling and bone destruction in a rat model of arthritis.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>17</sub>H<sub>19</sub>F<sub>3</sub>N<sub>6</sub>O.<sup>1</sup>/<sub>4</sub>H<sub>2</sub>O Batch Molecular Weight: 384.87 Physical Appearance: Off White solid

#### Minimum Purity: ≥98%

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



#### Storage: Store at -20°C

Solubility & Usage Info: DMSO to 100 mM ethanol to 50 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  $45-60^{\circ}C$  water bath).

Catalog No.: 7783

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. \*Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:**

**Parmentier** *et al* (2018) *In vitro* and *in vivo* characterization of the JAK1 selectivity of upadacitinib (ABT-494). BMC Rheumatol. **2** 23. PMID: 30886973.

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

bio-techne.com	North America	China	Europe Middle East Africa	Rest of World
info@bio-techne.com techsupport@bio-techne.com	Tel: (800) 343 7475	info.cn@bio-techne.com Tel: +86 (21) 52380373	Tel: +44 (0)1235 529449	www.tocris.com/distributors Tel:+1 612 379 2956