

Catalog # Aliquot Size

\$35-904E-5 5 mg \$35-904E-25 25 mg

# SirtAct

Epigenetic Enzyme Activator

## Catalog # \$35-904E

Lot # P3320-34

CAS # 839699-72-8

## **Product Description**

Molecular Formula: C<sub>20</sub>H<sub>25</sub>N<sub>5</sub>O<sub>2</sub> Appearance: Olive green powder

Molecular Weight: 367.4

Purity: 98% (TLC); NMR (Conforms)

Solubilization: May be dissolved in DMSO (50 mg/ml); or

ethanol (20 mg/ml, warm)

### **Alias**

2-Amino-N-cyclopentyl-1-(3-methoxypropyl)-1H-pyrrolo[2,3-b]quinoxaline-3-carboxamide; CAY10591

## **Specific Activity**

SIRT1 Activator

# **Storage and Stability**

Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to 3 months.

### **Scientific Background**

Sirt1 activator (233% at 10  $\mu$ M using the BIOMOL Fluor-de-Lys assay) <sup>1</sup> It suppressed TNF $\alpha$  release from THP-1 cells and stimulated adipogenesis in 3T3L1 cells <sup>1</sup>. SIRT1 stimulation by SirtAct leads to decreased tissue factor mediated thrombogenicity in mice<sup>2</sup>. It inhibited NF $\alpha$ B activation and reduced inflammatory cytokine production in lamina propria mononuclear cells from IBD patients<sup>3</sup>. It prevented and cured experimental colitis in a mouse model<sup>3</sup>.

### References

- 1. VM Nayagam et al. J. Biomol. Screen. 2006 11:959
- 2. SS Barbieri et al. Circulation 2012 126:1373
- 3. R Caruso et al. Mucosal Immunol. 2014 May 21 Epub

## **Molecular Structure**

$$O \rightarrow H$$
 $N \rightarrow NH_2$ 
 $N \rightarrow NH_2$ 
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# **SAFETY DATA SHEET**

# Article 1 - Identification of the Substance and of the Company/Undertaking

Product Name: SirtAct Catalog # \$35-904E

This product is sold only for research use by qualified laboratory personnel, and is not to be used as a drug, medical device, food additive, cosmetic, nor household chemical. It is not to be used in diagnostic, therapeutic, consumer, agricultural, nor pesticidal applications.

Manufacturer's Name: SignalChem Pharmaceuticals Inc.

Street Address: 110-13120 Vanier Place City, Prov. Postal Code: Richmond, BC, V6V 2J2

Fax: 604-232-4601 EMERGENCY PHONE: 604-232-4600

# **Article 2 - Hazardous Identification**

### 2.1 Classification of Substance (GHS)

Skin Category 2 Eye Category 2A

Specific target organ toxicity - single exposure (Category 3)

#### 2.2 Label Elements

Classification according to Regulation (EC) No 1272/2008



GHS07

H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321	Specific treatment (see on this label).
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.3 Other hazards

Data not available

# **Article 3 – Composition/Information on Ingredients**

### 3.1 Substance

Product Name(s): SirtAct, 2-Amino-N-cyclopentyl-1-(3-methoxypropyl)-1H-pyrrolo[2,3-b]quinoxaline-3-carboxamide; CAY10591

Molecular Formula:  $C_{20}H_{25}N_5O_2$ 

CAS # 839699-72-8

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## Article 4 - First Aid

### 4.1 Description of First Aid Measures

General: Move out of dangerous area and contact a doctor. Provide them with this data sheet.

If Inhaled: Move to fresh air, and monitor breathing. Give artificial respiration if breathing stops. Consult a doctor.

In Case of Skin Contact: Remove contaminated clothing. Wash with soap and water for an extended period of time. Consult a doctor.

In Case of Eye Contact: Immediately flush eye(s) with copious amounts of water for at least 15 minutes. Consult a doctor.

If Swallowed: Rinse out the mouth with water. Do not give anything by mouth. Consult a doctor.

#### 4.2 Important Symptoms and Effects

Lung, skin and eye irritant. Prolonged exposure is not known to aggravate prior medical conditions

## **Article 5 – Fire Fighting Measures**

### 5.1 Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special Hazards

May emit toxic fumes.

#### 5.3 Precautions for Fire Fighters

Wear suitable protection to prevent contact and respirator for fumes.

## Article 6 - Accidental Release Measures

### **6.1 Personal Precautions**

Relocate personnel to a safe area and ensure ventilation is in working order. Wear protective equipment. Avoid dust formation and inhalation of fumes.

#### **6.2 Environmental Precautions**

Do not let product enter drains

#### 6.3 Methods for Containment and Clean-up

Sweep up material without generating dust clouds and place in a sealed container for disposal. Clean surface where spill occurred.

## **Article 7 – Handling and Storage**

#### 7.1 Handling Precautions

Use in a well ventilated area. Avoid formation of dust or aerosols. Keep away from sources of ignition. Wear suitable protective clothing. Avoid inhalation, and skin or eye contact.

### 7.2 Safe Storage Measures

Keep product in a sealed contained located in dry well ventilated area.

# **Article 8 – Exposure Controls/Personal Protection**

#### 8.1 Control Parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Specific Engineering Controls

Keep airborne levels low by using a fumehood or local exhaust.

### 8.3 Personal Protection

Eye/Face Protection: Use safety glasses.

Skin Protection: Use chemical resistant gloves. Remove and dispose of gloves properly after use. Wash hands thoroughly after use.

**Body Protection:** Wear a lab coat.

**Respiratory Protection:** If risk is present wear a dust respirator.

## **Article 9 – Physical and Chemical Properties**

**Appearance:** Olive green powder **Odour:** data not available

Odour Threshold: data not available

pH: data not available
Boiling Pt: data not available
Flash Pt: data not available

Explosive Properties: data not available

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# Article 10 - Stability and Reactivity

#### 10.1 Stability

Stable under recommended transport or storage conditions

#### 10.2 Conditions to Avoid

Moist and hot conditions

### 10.3 Hazardous Decomposition Products

Carbon oxides (CO, CO<sub>2</sub>). Possible toxic fumes upon combustion.

# Article 11- Toxicological Information

## 11.1 Toxicological Effects

Acute Toxicity: data not available

Skin Corrosion/Irritation: data not available Eye Damage/Irritation: data not available Respiratory or Skin Sensitization: data not available

Germ Cell Mutagenicity: data not available
Carcinogenicity: None according to NIOSH

# **Article 12 – Ecological Information**

#### 12.1 Toxicity

Data not available

#### 12.2 Degradability

Data not available

# **Article 13 - Disposal Considerations**

#### 13.1 Waste Treatment

Product and Contaminated Packaging: Dispose according to national legislation. Contact a licensed chemical disposal company.

# **Article 14 - Transport Information**

#### 14.1 DOT

Not dangerous

### 14.2 IMDG

Not dangerous

#### 14.2 IATA

Not dangerous

# **Article 15 - Regulatory Information**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

## **Article 16 - Other Information**

Copyright 2013 SignalChem Pharmaceuticals. This company shall not be held liable for any damage resulting from handling or from contact with the above product. This material must only be handled by suitably qualified experienced scientists in appropriately equipped and authorized facilities. The above information is believed to be correct but does not purport to be all inclusive and should be used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriate safety legislature. The absence of warning must not, under any circumstance, be taken to mean that no hazard exists.

Prepared by: Jun Yan Phone#: 1-866-954-6273

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