

**SC-79**

AKT Activator

**Catalog # A16-901**

Lot # K4547-27

CAS # 305834-79-1

**Catalog #****Aliquot Size****A16-901-5****5 mg****A16-901-25****25 mg**

## Product Description

Molecular Formula: C<sub>17</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>5</sub>

Appearance: White powder

Molecular Weight: 364.80

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

Solubilization: May be dissolved in DMSO (100 mg/ml) or ethanol (40 mg/ml, warm)

## Alias

2-Amino-6-chloro- $\alpha$ -cyano-3-(ethoxycarbonyl)-4H-1-benzopyran-4-acetic acid, ethyl ester

## Specific Activity

AKT Activator

## Storage and Stability

Store desiccated as supplied at -20°C for up to 1 year.

Store solutions at -20°C for up to 2 months.

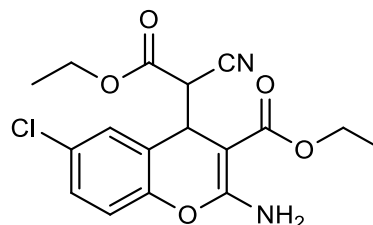
## Scientific Background

Akt activator. Binds to the pleckstrin homology domain of Akt preventing membrane translocation but activating it in the cytosol. Enhances Akt phosphorylation by upstream protein kinases. Suppresses excitotoxicity-induced neuronal death *in vitro* and *in vivo* (1). A useful tool for studying PI3K/Akt axis (2,3).

## References

1. H Jo *et al.* *Proc. Natl. Acad. Sci. USA* 2012 109:10581
2. W. Yang *et al.* *Cell. Physiol. Biochem.* 2016 38:2366
3. YX Chen *et al.* *Oncotarget* 2017 8:31065

## Molecular Structure

**SC-79**

AKT Activator

Catalog #

A16-901

CAS #

305834-79-1

Lot #

K4547-27

Purity

98% (TLC); NMR (Conforms)

Format

Lyophilized white powder

Solubilization

May be dissolved in DMSO (100 mg/ml)  
Ethanol (40 mg/ml, warm)

Storage &amp; Shipping

Store desiccated as supplied at -20°C  
for up to 1 year. Store solutions at -20°C  
for up to 2 months.

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# SAFETY DATA SHEET

## Article 1 – Identification of the Substance

**Product Name: SC-79**

**Catalog # A16-901**

*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 Biotech 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)

The substance is not classified, according to the Globally Harmonized System (GHS).

### 2.2 Label Elements

None

**GHS Signal Word:** Not applicable

**GHS Hazard Phrases:** Not applicable

**GHS Precaution Phrases:** Not applicable

**GHS Response Phrases:** Not applicable

**GHS Storage and Disposal Phrases:** Please refer to Section 7 for Storage and Section 13 for Disposal Information

**2.3 Other hazards:** To the best of our knowledge, the toxicological properties have not been thoroughly investigated.

## Article 3 – Composition/Information on Ingredients

### 3.1 Substance

**Product Name(s):** SC-79  
**Chemical Name:** 2-Amino-6-chloro-a-cyano-3-(ethoxycarbonyl)-4H-1-benzopyran-4-acetic acid, ethyl ester  
**Molecular Formula:** C<sub>17</sub>H<sub>17</sub>ClN<sub>2</sub>O<sub>5</sub>  
**CAS Number:** 305834-79-1  
**Concentration:** 100%

## Article 4 – First Aid

### 4.1 Description of First Aid Measures

**General:** No special measures required.

**If Inhaled:** Supply fresh air; consult doctor in case of complaints.

**In Case of Skin Contact:** Generally, the product does not irritate the skin.

**In Case of Eye Contact:** Rinse opened eye for several minutes under running water.

**If Swallowed:** If symptoms persist, consult doctor.

**4.2 Important Symptoms and Effects:** May cause anemia, cough, CNS depression, drowsiness, headache, heart damage, lassitude (weakness, exhaustion), liver damage, narcosis, reproductive effects, teratogenic effects. No further information available.

## Article 5 – Fire Fighting Measures

### 5.1 Extinguishing Media

Use fire-fighting measures that suit the environment. A solid water stream may be inefficient.

### 5.2 Special Hazards

No further relevant information available.

### 5.3 Precautions for Fire Fighters

No special measures required.

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## Article 6 – Accidental Release Measures

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### 6.1 Personal Precautions

Not required.

### 6.2 Environmental Precautions

Do not allow to enter sewers/surface or ground water.

### 6.3 Methods for Containment and Clean-up

Pick up mechanically.

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## Article 7 – Handling and Storage

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### 7.1 Handling Precautions

No special measures required.

### 7.2 Safe Storage Measures

Keep container tightly closed. Store in accordance with information listed on the product insert.

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## Article 8 – Exposure Controls/Personal Protection

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### 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:** Not required.

**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.

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## Article 9 – Physical and Chemical Properties

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**Appearance:** White powder

**Odour:** data not available

**Odour Threshold:** data not available

**pH:** data not available

**Melting/Freezing Pt:** data not available

**Boiling Pt:** data not available

**Flash Pt:** data not available

**Explosive Properties:** data not available

**Solubility notes:** May be dissolved in DMSO (100 mg/ml) or ethanol (40 mg/ml, warm)

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## Article 10 – Stability and Reactivity

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**10.1 Stability:** No further relevant information available.

**10.2 Conditions to Avoid:** No further relevant information available.

**10.3 Incompatibility – Materials to Avoid:** Strong oxidizing agents

**10.4 Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>), hydrogen chloride, nitrogen oxides.

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## Article 11– Toxicological Information

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**11.1 Toxicological Effects:** The toxicological effects of this product have not been thoroughly studied.

**Acute Toxicity:** Oral TDLO (mouse): 50 mg/kg

**Chronic Toxicity:** Investigated as a drug.

For complete information, see Registry of Toxic Effects of Chemical Substances (RTECS) entry. Ruxolitinib RTECS Number: UQ8002700

**Skin Corrosion/Irritation:** No irritating effect

**Eye Damage/Irritation:** No irritating effect.

**Respiratory or Skin Sensitization:** No sensitizing effects known.

**Germ Cell Mutagenicity:** data not available

**Carcinogenicity:** None according to NIOSH

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## Article 12 – Ecological Information

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### 12.1 Toxicity

Avoid release into the environment.

### 12.2 Degradability

Data not available

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## Article 13 – Disposal Considerations

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### 13.1 Waste Treatment

Smaller quantities can be disposed of with household waste. Disposal must be made according to official regulations.

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## Article 14 – Transport Information

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### 14.1 DOT

Not dangerous goods

### 14.2 IMDG

Not dangerous goods

### 14.2 IATA

Not dangerous goods

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## Article 15 – Regulatory Information

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

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## Article 16 – Other Information

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The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. SignalChem shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalog for additional terms and conditions of sale.

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