

SU-4312

Kinase Inhibitor

Catalog # F11-900F

Lot # T4382-10

CAS #5812-07-7

Product Description

Molecular Formula: C₁₇H₁₆N₂O

Appearance: Orange powder

Melting Point: N/A

Molecular Weight: 264.3

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

Solubilization: May be dissolved DMSO (25 mg/ml)

Aliases

- 3-(4-Dimethylaminobenzylidene)-1,3-dihydroindol-2-one
- DMBI

Specific Activity

VEGFR; PDGFR inhibitor.

Storage and Stability

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

Store solutions at -20°C for up to 3 months.

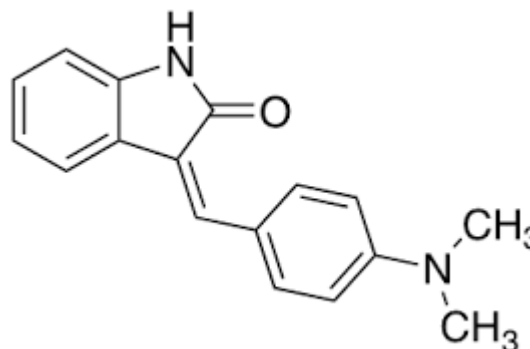
Scientific Background

Potent and selective inhibitor of VEGF receptor tyrosine kinase (Flk-1, KDR). Inhibits unactivated kinase 100-fold greater (IC₅₀=0.04 μM) than activated kinase (IC₅₀=4.0 μM) (1). Weak inhibitor of PDGF receptor tyrosine kinase (IC₅₀=19.4 μM) (2). Inhibits endothelial cell activation and angiogenesis in a mouse model of Alzheimers disease (3).

References

1. RL Kendall *et al.* *J. Biol. Chem.* 1999 274:6453
2. L Sun *et al.* *J. Med. Chem.* 1998 41:2588
3. Schultheiss *et al.* *Angiogenesis* 2006 9:59

Molecular Structure



SU-4312

Kinase Inhibitor

Catalog #

F11-900F

CAS #

5812-07-7

Lot #

T4382-10

Purity

>98% (TLC); NMR (Conforms)

Format

Lyophilized powder

Solubilization

May be dissolved DMSO (25 mg/ml)

Storage & Shipping

Store desiccated as supplied at -20°C for up to 1 year. Store solutions at -20°C for up to 3 months.

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SAFETY DATA SHEET

Article 1 – Identification of the Substance

Product Name: SU-4312

Catalog # F11-900F

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)

Skin Corrosion/Irritation, Category 2
Eye Damage/Eye Irritation, Category 2A
Specific target organ toxicity (single exposure) Category 3

2.2 Label Elements

Classification according to Regulation (EC) No 1272/2008



GHS07

GHS Signal Word: WARNING

GHS Hazard Phrases:

| | |
|------|-----------------------------------|
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |

GHS Precaution Phrases:

| | |
|------|--|
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P264 | Wash thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |

GHS Response Phrases:

| | |
|----------------|--|
| P302+352 | IF ON SKIN: Wash with plenty of soap and water. |
| P304+P340 | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER or doctor/physician if you feel unwell. |
| P332+313 | If skin irritation occurs, get medical advice/attention. |
| P337+313 | If eye irritation occurs, get medical advice/attention. |
| P362+364 | Take off contaminated clothing and wash it before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |

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.

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Article 3 – Composition/Information on Ingredients

3.1 Substance

Product Name(s): SU-4312
Chemical Name: 3-(4-Dimethylaminobenzylidene)-1,3-dihydroindol-2-one
Molecular Formula: C₁₇H₁₆N₂O
CAS Number: 5812-07-7
Concentration: 100%

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.

After inhalation: In case of unconsciousness place patient stably in side position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

After swallowing: If symptoms persist, consult a 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.

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.

Article 6 – Accidental Release Measures

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

Ensure adequate ventilation.

Article 7 – Handling and Storage

7.1 Handling Precautions

No special precautions are necessary if used correctly. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid prolonged or repeated exposure. Keep away from sources of ignition. Take precautionary measures against static charge.

7.2 Safe Storage Measures

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

Article 8 – Exposure Controls/Personal Protection

8.1 Control Parameters

The following constituent is the only constituent of the product which has a PEL, TLV, or other recommended exposure limit. At this time, the remaining constituent has no known exposure limits.

8.2 Specific Engineering Controls

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

8.3 Personal Protection

Eye/Face Protection: Use tightly sealed goggles.

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: In case of brief exposure or low pollution, use respiratory filter device. In case of intensive or longer exposure, use respiratory device that is independent of circulating air.

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Article 9 – Physical and Chemical Properties

Appearance: Orange 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 DMSO (25 mg/ml)

Article 10 – Stability and Reactivity

10.1 Stability: Stable under recommended transport or storage conditions
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, nitrogen oxides.

Article 11– Toxicological Information

11.1 Toxicological Effects: The toxicological effects of this product have not been thoroughly studied.
Acute Toxicity: data not available.
Chronic Toxicity: data not available.
Skin Corrosion/Irritation: Irritant to skin and mucous membranes.
Eye Damage/Irritation: irritating effect
Respiratory or Skin Sensitization: data not available
Germ Cell Mutagenicity: data not available
Carcinogenicity: Substance not listed on IARC, NTP, OSHA-Ca.

Article 12 – Ecological Information

12.1 Toxicity
Water hazard class 1 (self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
12.2 Degradability
Data not available

Article 13 – Disposal Considerations

13.1 Waste Treatment
Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Disposal must be made according to official regulations.

Article 14 – Transport Information

14.1 DOT
Not dangerous goods
14.2 IMDG
Not dangerous goods
14.2 IATA
Not dangerous goods

Article 15 – Regulatory Information

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.

Article 16 – Other Information

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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