

Pan-Bcr-Abl and Multikinase Inhibitor

# Cataloa # A03-900

Lot # O3936-11 CAS # 943319-70-8

# **Product Description**

Molecular Formula: C<sub>29</sub>H<sub>27</sub>F<sub>3</sub>N<sub>6</sub>O Appearance: Yellow powder Molecular Weight: 532.6 Purity: >98% (HPLC); NMR (conforms) Solubility: May be dissolved DMSO (50 mg/ml); ethanol (25 mg/ml, warm)

# Alias

3-(2-Imidazo[1,2-b]pyridazin-3-ylethynyl)-4-methyl-N-[4-[(4methyl-1-piperazinyl)methyl]-3-(trifluoromethyl)phenyl]benzamide; AP-24534

# **Specific Activity**

Pan-Bcr-Abl and Multikinase Inhibitor

# 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**

Potent, broad inhibitor of Bcr-Abl and other tyrosine kinases: Bcr-Abl (IC $_{50}$ =0.37 nM) and its mutants T315I (IC $_{50}$ =2 nM), Q252H (IC50=0.44 nM), Y253F (IC50=0.3 nM), M351T (IC<sub>50</sub>=0.3 nM) and H396P (IC<sub>50</sub>=0.34 nM) (1). Also inhibits PDGFRa, c-Src and c-Kit (IC<sub>50</sub>=1.1, 5.4, and 12.5 nM) (2), and FGFR-mediated signaling (IC<sub>50</sub><40 nM) (3). It reduces influenza A virus-induced death by suppressing the "cytokine storm" in mouse models (4).

#### References

- 1. O'Hare T et al. Cancer Cell 2009 16:401
- 2. Gozgit JM et al. Mol. Cancer Ther. 2011 10:1028
- 3. Gozgit JM et al. Mol. Cancer Ther. 2012 11:690
- 4. Chen S et al. Front. Immunol. 2019 10:1393

Catalog #	Aliquot Size
A03-900	5 mg
A03-900	25 mg

**Molecular Structure** 



# Ponatinib

Pan-Bcr-Abl and Multikinase Inhibitor

Catalog # CAS # Lot # Purity Format Solubility

# A03-900 943319-70-8 O3936-11 >98% (HPLC); NMR (conforms) Yellow powder May be dissolved DMSO (50 mg/ml); ethanol

Storage & Shipping

(25 mg/ml, warm) Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to 3 months.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: <u>orders@signalchem.com</u> or <u>IVD@signalchem.com</u> - <u>www.signalchem.com</u>

# **SAFETY DATA SHEET**

# **Article 1 – Identification of the Substance**

# Product Name: Ponatinib

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: Street Address: City, Prov. Postal Code: Fax: EMERGENCY PHONE: SignalChem Biotech Inc. 110-13120 Vanier Place Richmond, BC, V6V 2J2 604-232-4601 604-232-4600

# **Article 2 - Hazardous Identification**

# 2.1 Classification of Substance (GHS)

Skin corrosion/irritation (Category 2), H315 Serious eye damage/eye irritation (Category 2A), H319 Specific target organ toxicity – single exposure (Category 3): Respiratory system, H335

#### 2.2 Label Elements

Classification according to Regulation (EC) No 1272/2008

# <!

#### 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
P 105+151+118 /		IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P302+352	IF ON SKIN: Wash with plenty of soap and water.

#### **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):	Ponatinib
Floader Name(s).	Forialitie
Chemical Name:	3-(2-Imidazo[1,2-b]pyridazin-3-ylethynyl)-4-methyl-N-[4-[(4-methyl-1-piperazinyl)methyl]-3-(trifluoromethyl)phenyl]-benzamide
Molecular Formula:	$C_{29}H_{27}F_3N_6O$
CAS Number:	943319-70-8
Concentration:	100%

# Catalog # A03-900

# **SAFETY DATA SHEET**

# Article 4 – First Aid

#### 4.1 Description of First Aid Measures

**General:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. **If Inhaled:** If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician. **In Case of Skin Contact:** Wash with soap and plenty of water. Consult a physician.

In Case of Eye Contact: Flush eyes with water as a precaution.

If Swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Important Symptoms and Effects: The most important known symptoms and effects are described in section 2.2.

# **Article 5 – Fire Fighting Measures**

#### 5.1 Extinguishing Media

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

5.2 Special Hazards:

No data available.

#### **5.3 Precautions for Fire Fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

# **Article 6 – Accidental Release Measures**

#### **6.1 Personal Precautions**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### **6.2 Environmental Precautions**

Do not let product enter drains.

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

Pick up and arrange disposal without creating dust using wet towels for small quantities, for example. Keep in suitable, closed containers for disposal. Offer surplus and non-recyclable solutions to a licensed disposal company.

# Article 7 – Handling and Storage

#### 7.1 Handling Precautions

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

## 7.2 Safe Storage Measures

Keep product tightly closed in a dry and well-ventilated place.

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

#### 8.1 Control Parameters

This product does not contain any hazardous materials with occupational exposure limits established by region-specific regulatory bodies.

# 8.3 Personal Protection

Eye/Face Protection: Tightly fitting safety goggles. Face shield.

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: Wear NIOSH / MSHA-approved respirator if required.

**Personal Hygiene Measures:** When using this product, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Provide regular cleaning equipment, work area and clothing.

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

Appearance: Yellow 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 (50 mg/ml); or ethanol (25 mg/ml, warm)

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: <u>orders@signalchem.com</u> or <u>IVD@signalchem.com</u> - <u>www.signalchem.com</u>

# **SAFETY DATA SHEET**

# Article 10 – Stability and Reactivity

10.1 Stability: Stable under recommended transport or storage conditions

10.2 Conditions to Avoid: No data available.

10.3 Incompatibility – Materials to Avoid: Strong oxidizing agents.

10.4 Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, hydrogen fluoride.

# **Article 11– Toxicological Information**

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

# **Article 12 – Ecological Information**

12.1 Toxicity

Avoid release into the environment.

## 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 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.