

# Certificate of Analysis

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**Product Name:** HI TOPK 032

**Catalog No.:** 4555

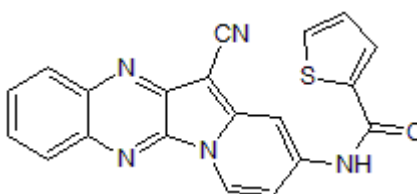
**Batch No.:** 1

CAS Number: 487020-03-1

IUPAC Name: *N*-(12-Cyanoindolizino[2,3-*b*]quinoxalin-2-yl)-2-thiophenecarboxamide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>20</sub>H<sub>11</sub>N<sub>5</sub>OS  
**Batch Molecular Weight:** 369.4  
**Physical Appearance:** Red solid  
**Solubility:** DMSO to 20 mM  
**Storage:** Store at +4°C  
**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**HPLC:** Shows 98.5% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	65.03	3	18.96
Found	64.69	3.08	18.84

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

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**Description:**

T-LAK-cell-originated protein kinase (TOPK) inhibitor; exhibits selectivity for TOPK over other MAPKK family members including ERK1, JNK1 and p38. Blocks proliferation of HCT116 colon cancer cells; suppresses tumor growth in a colon cancer xenograft model. Also inhibits Chk1 (IC<sub>50</sub> = 9.6 μM).

**Physical and Chemical Properties:**

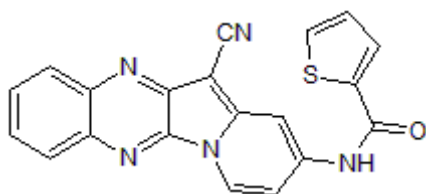
Batch Molecular Formula: C<sub>20</sub>H<sub>11</sub>N<sub>5</sub>OS

Batch Molecular Weight: 369.4

Physical Appearance: Red solid

**Minimum Purity:** >98%

**Batch Molecular Structure:**



**References:**

Li *et al* (2011) Discovery of novel checkpoint kinase 1 inhibitors by virtual screening based on multiple crystal structures. *J.Chem.Inf.Model.* **51** 2904. PMID: 21955044.

Kim *et al* (2012) Novel TOPK inhibitor HI-TOPK-032 effectively suppresses colon cancer growth. *Cancer Res.* **72** 3060. PMID: 22523035.

**Storage:** Store at +4°C

**Solubility & Usage Info:**

DMSO to 20 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°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**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.

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