Product Name: PHT 427
Catalog No.: 4598  Batch No.: 1
CAS Number: 1191951-57-1
IUPAC Name: 4-Dodecyl-N-1,3,4-thiadiazol-2-yl-benzenesulfonamide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{20}H_{31}N_{3}O_{2}S_{2}
Batch Molecular Weight: 409.61
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C

2. ANALYTICAL DATA

TLC: R_{f} = 0.47 (Chloroform:Methanol [9:1])
HPLC: Shows 99.6% purity
\(^1\)H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th>C</th>
<th>H</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>58.64</td>
<td>7.63</td>
</tr>
<tr>
<td>Found</td>
<td>58.89</td>
<td>7.59</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: PHT 427
Catalog No.: 4598
Batch No.: 1

CAS Number: 1191951-57-1
IUPAC Name: 4-Dodecyl-N-1,3,4-thiadiazol-2-yl-benzenesulfonamide

Description:
Dual Akt and PDK1 inhibitor; binds the pleckstrin homology (PH) domain of Akt and PDK1 (K_i values are 2.7 and 5.2 μM, respectively). Inhibits Akt phosphorylation and Akt downstream targets; also induces apoptosis in vitro. Displays synergistic antitumor effect when combined with chemotherapeutics in breast cancer mouse models.

Physical and Chemical Properties:
Batch Molecular Formula: C_{20}H_{31}N_3O_2S_2
Batch Molecular Weight: 409.61
Physical Appearance: White solid

Minimum Purity: >98%

Storage: Store at -20°C

Solubility & Usage Info:
DMSO to 100 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.

References:

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

bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel:+1 612 379 2956