1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{16}H_9Cl_2N_2O_2S_2K \cdot \frac{3}{4}H_2O \)
Batch Molecular Weight: 448.89
Physical Appearance: Off White solid
Solubility: water to 100 mM
DMSO to 50 mM
Storage: Store at -20°C

2. ANALYTICAL DATA

HPLC: Shows 97.3% purity
\(^1\)H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>42.81</td>
<td>42.19</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>2.36</td>
<td>2.14</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>6.24</td>
<td>6.05</td>
</tr>
</tbody>
</table>
Product Name: Yoda 2  
Catalog No.: 8051

IUPAC Name: Potassium 4-((5-(2,6-dichlorobenzyl)thio)-1,3,4-thiadiazol-2-yl)benzoate

Description:
Yoda 2 is a selective Piezo1 channel activator (EC$_{50}$ values are 150 nM and 1.14 μM in mPiezo1 and HUVEC cells respectively). Increases Ca$^{2+}$ signaling 2.8 fold in hPIEZO-TREx and 1.2 fold in mPiezo1-TREx, compared to Yoda 1 (Cat. No. 5586). Induces concentration-dependent relaxation of mouse portal vein (EC$_{50}$ = 1.2 μM). Suitable for use in vivo and in vitro.

Physical and Chemical Properties:

Batch Molecular Formula: C$_{18}$H$_{13}$Cl$_{2}$N$_{2}$O$_{2}$S$_{2}$K.½H$_{2}$O

Batch Molecular Weight: 448.89

Physical Appearance: Off White solid

Minimum Purity: ≥97%

Batch Molecular Structure:

Storage: Store at -20°C

Solubility & Usage Info:
Water to 100 mM
DMSO to 50 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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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: