Product Name: FAI
CAS Number: 1415238-77-5
IUPAC Name: 1H-Imidazol-1-yl(2-methyl-3-furanyl)methanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₉H₈N₂O₂
Batch Molecular Weight: 176.17
Physical Appearance: White crystalline solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C

2. ANALYTICAL DATA

¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
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Description:
FAI is a reagent for RNA SHAPE-MaP experiments in live cells. Can be used to map RNA structures in vivo by forming stable 2'-OH adducts with RNA, blocking reverse transcriptase elongation. In vitro, FAI activity can be quenched with Dithiothreitol (Cat. No. 3154) and can be used to probe the secondary structure of mouse embryonic stem cell 5S rRNA. At elevated temperatures, FAI forms more stable adducts and exhibits less hydrolysis than NAI (Cat. No 7004).

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Batch Molecular Structure:

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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. *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: