

Certificate of Analysis

Print Date: Jan 15th 2016

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Product Name: 4-HQN Catalog No.: 2192 Batch No.: 1

CAS Number: 491-36-1 EC Number: 207-735-8

IUPAC Name: 4-(1*H*)-Quinazolinone

1. PHYSICAL AND CHEMICAL PROPERTIES

 $\begin{array}{lll} \textbf{Batch Molecular Formula:} & \textbf{C_8H}_6$N}_2$O \\ \textbf{Batch Molecular Weight:} & 146.15 \\ \textbf{Physical Appearance:} & \textbf{White solid} \\ \textbf{Solubility:} & \text{water to 10 mM} \\ \textbf{DMSO to 100 mM} \end{array}$

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

TLC: $R_f = 0.78$ (Pyridine:Acetic acid:Water:Butanol [3:8:11:33])

Melting Point:

Between 216 - 219°C

Shows >99.9% purity

1H NMR:

Consistent with structure



Product Information

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IUPAC Name: 4-(1*H*)-Quinazolinone

Description:

Inhibitor of poly(ADP-ribose) polymerase (PARP) (IC $_{50}$ = 9.5 μ M); displays mixed inhibition with respect to NAD+. Protective against ischemia-reperfusion induced ROS production, and subsequent mitochondrial and cell damage in rat heart. Anti-inflammatory in LPS-induced endotoxic mice in vivo; decreases NF-kB and AP-1 activation.

Physical and Chemical Properties:

Batch Molecular Formula: $C_8H_6N_2O$ Batch Molecular Weight: 146.15 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at RT

Solubility & Usage Info:

water to 10 mM 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:

Banasik et al (1992) Specific inhibitors of poly(ADP-ribose) synthetase and mono(ADP-ribosyl)transferase. J.Biol.Chem. 267 1569. PMID: 1530940.

Halmosi et al (2001) Effect of poly(ADP-ribose) polymerase inhibitors on the ischemia-reperfusion-induced oxidative cell damage and mitochondrial metabolism in Langendorff heart perfusion system. Mol.Pharmacol. 59 1497. PMID: 11353811.

Veres *et al* (2004) Regulation of kinase cascades and transcription factors by a poly(ADP-ribose) polymerase-1 inhibitor, 4-hydroxyquinazoline, in lipopolysaccharide-induced inflammation in mice. J.Pharmacol.Exp.Ther. **310** 247. PMID: 14999056.