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# **DATASHEET**

EHNA hydrochloride

### **Product overview**

Name EHNA hydrochloride

Cat NoHB3540Biological actionInhibitorPurity>98%

**Description** Potent adenosine deaminase and PDE2 inhibitor. Supresses spontaneous hESC differentiation. Also

maintains pluripotency of hESCs in the absence of exogenous cytokines.

## **Biological Data**

**Biological description** Potent adenosine deaminase (ADA) and PDE2 inhibitor ( $K_i = 1.6 \text{ nM}$  at ADA and IC<sub>50</sub> values are 0.8

and 4 MM at human and porcine PDE2 respectively. Reversibly supresses spontaneous hESCs differentiation. Also acts as a strong blocker of directed neuronal differentiation. Also maintains

pluripotency of hESCs in the absence of exogenous cytokines.

### **Solubility & Handling**

Solubility overview Soluble in water (100mM) or DMSO (100mM)

Storage instructions Room temperature

Storage of solutions Prepare and use solutions on the same day if possible. Store solutions at -20 °C for up to one month if

storage is required. Equilibrate to RT and ensure the solution is precipitate free before use.

Shipping Conditions Stable for ambient temperature shipping. Follow storage instructions on receipt.

Important This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use.

#### **Chemical Data**

**Chemical name** *erythro*-9-(2-Hydroxy-3-nonyl)adenin e hydrochloride **Molecular Weight** 313.83

Chemical structure

 SMILES
 NC1=NC=NC2=C1N=CN2[C@@H](CCCCCC)[C@H](O)C.CI

 InChiKey
 VVDXNJRUNJMYOZ-DHXVBOOMSA-N

### References

Probing the active site of adenosine deaminase by a pH responsive fluorescent competitive inhibitor.

Caiolfa et al (1998) Biophys Chem 70(1)

PubMedID 9474762

Erythro-9-(2-hydroxy-3-nonyl)adenine (EHNA) blocks differentiation and maintains the expression of pluripotency markers in human embryonic stem cells.

Burton et al (2010) Biochem J 432(3)

PubMedID 20923411

Inhibition of adenosine deaminase by erythro-9-(2-hydroxy-3-nonyl)adenine (EHNA) mimics the effect of inescapable shock on escape learning in rats.

Woodson et al (1998) Behav Neurosci 112(2) **PubMedID** 9588486