

Hello Bio, Inc.  
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500  
F. 609-228-4994

customercare-usa@hellobio.com



## DATASHEET

EHNA hydrochloride

### Product overview

<b>Name</b>	EHNA hydrochloride
<b>Cat No</b>	HB3540
<b>Biological action</b>	Inhibitor
<b>Purity</b>	>98%
<b>Description</b>	Potent adenosine deaminase and PDE2 inhibitor. Suppresses spontaneous hESC differentiation. Also maintains pluripotency of hESCs in the absence of exogenous cytokines.

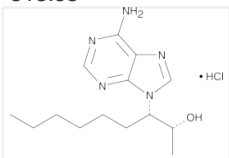
### Biological Data

<b>Biological description</b>	Potent adenosine deaminase (ADA) and PDE2 inhibitor ( $K_i = 1.6$ nM at ADA and $IC_{50}$ values are 0.8 and 4 $\mu$ M at human and porcine PDE2 respectively). Reversibly suppresses 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

<b>Storage instructions</b>	Room temperature
<b>Solubility overview</b>	Soluble in water (100mM) or DMSO (100mM)
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

### Chemical Data

<b>Chemical name</b>	<i>erythro</i> -9-(2-Hydroxy-3-nonyl)adenine hydrochloride
<b>Molecular Weight</b>	313.83
<b>Chemical structure</b>	
<b>Molecular Formula</b>	$C_{14}H_{23}N_5O \cdot HCl$
<b>CAS Number</b>	58337-38-5
<b>PubChem identifier</b>	11056106
<b>SMILES</b>	<chem>NC1=NC=NC2=C1N=CN2[C@@H](CCCCCC)[C@H](O)C.Cl</chem>
<b>InChiKey</b>	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](#)

---