Desaminotyrosine

Cat. No.: HY-W015346
CAS No.: 501-97-3
Molecular Formula: $C_9H_{10}O_3$
Molecular Weight: 166.18
Target: Influenza Virus; Endogenous Metabolite
Pathway: Anti-infection; Metabolic Enzyme/Protease
Storage: Powder
-20°C 3 years
4°C 2 years
In solvent
-80°C 6 months
-20°C 1 month

**SOLVENT & SOLUBILITY**

<table>
<thead>
<tr>
<th>In Vitro</th>
<th>DMSO : $\geq$ 300 mg/mL (1805.27 mM)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“$\geq$” means soluble, but saturation unknown.</td>
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<tr>
<td>Preparing Stock Solutions</td>
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<tr>
<td>Solvent</td>
<td>Mass</td>
</tr>
<tr>
<td>1 mM</td>
<td>6.0176 mL</td>
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<tr>
<td>5 mM</td>
<td>1.2035 mL</td>
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<tr>
<td>10 mM</td>
<td>0.6018 mL</td>
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</table>

Please refer to the solubility information to select the appropriate solvent.

**BIOLOGICAL ACTIVITY**

**Description**
Desaminotyrosine is a microbially associated metabolite protecting from influenza through augmentation of type I interferon signaling.

**IC$_{50}$ & Target**
Human Endogenous Metabolite

**In Vivo**
Wild-type mice produce nanomoles of Desaminotyrosine per gram of feces and have picomolar quantities of Desaminotyrosine in the serum. Desaminotyrosine (200 mM) treatment before influenza infection, protects from influenza by type I interferon (IFN) signaling, with no effect on weight loss or survival in mice with or without vancomycin, neomycin, ampicillin, and metronidazole (VNAM). Desaminotyrosine enhances type I IFN in macrophages via type I IFN amplification in mice[1].
Mice\cite{1} Indicated mice receive 200 mM Desaminotyrosine dissolved in Kool-Aid in the drinking water (control animals receive Kool-Aid alone). Indicated mice receive poly(IC) injections of 1 mg/kg for vancomycin, neomycin, ampicillin, and metronidazole (VNAM) treated mice or 5 mg/kg for all other mice intraperitoneally daily for 4 days, and then mice are scarified on day five at which time serum is collected\cite{1}.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES


Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA