Spergualin trihydrochloride
from Bacillus laterosporus

Catalog Number S5822
Storage Temperature –20 °C

CAS RN 80952-47-2

Product Description
Molecular formula: C_{17}H_{37}N_{7}O_{4} \cdot 3\text{HCl}
Molecular weight: 512.9

\[
\begin{align*}
\text{HO} & \quad \text{NH} \\
\text{NH} & \quad \text{N} \quad \text{NH} \\
\text{OH} & \quad \text{OH} \\
\text{N} & \quad \text{NH} \\
\text{O} & \quad \text{O} \\
\text{H} & \quad \text{Cl}
\end{align*}
\]

\bullet 3 \text{HCl}

Spergualin is an antibiotic isolated from Bacillus laterosporus that possess antibacterial,\(^1\) antitumor,\(^1,2\) and strong immunosuppressive properties.\(^3-5\) Spergualin exhibits antitumor activity against transplantable leukemias in mice such as lymphatic leukemia L1210, monocytic leukemia P388, mastocytoma P815, or thymoma EL-4.\(^1,2\)

Spergualin was found effective in inhibiting skin graft rejection,\(^3\) preventing GVHD (Graft-Versus-Host-Disease) in mice recipients of allogeneic bone marrow and spleen cells,\(^4\) and modulating other immunologic diseases.\(^5\) One of its derivates, 15-deoxyspergualin was approved in Japan for the treatment of acute rejection in renal transplantation.\(^6\)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions
Spergualin is very soluble in water and methanol. It is slightly or not soluble in ethanol, ethyl acetate, acetone, cyclohexane, and other organic solvents.

Storage/Stability
Store desiccated at –20 °C. Under these conditions the product is stable for 2 years. The powder is highly hygroscopic.

A 10 mg/mL solution in water, is stable for 2 years at –20 °C (as determined by HPLC).

Spergualin solutions are unstable at acidic pH (pH <2) and at alkaline pH (pH >9).

References

KAA,SSL,MAM 10/07-1

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