

## 32-3644: Cyclosporin-A

### Description

Source : Beauveria Nlyea. Cyclosporin is a cyclic polypeptide immunosuppressant agent consisting of 11 amino acids and having a molecular weight of 1202.64. It is produced as a metabolite by the fungus species Beauveria nlyea. Chemically, cyclosporin is designated as [R-[R\*,R\*-(E)]]-cyclic(L-alanyl-D- alanyl-N-methyl-L-leucyl-N-methyl-L-leucyl-N-methyl-L-valyl-3-hydroxy-N, 4-dimethyl-L-2-amino-6-octenoyl-L-a-amino-buteryl- N-methylglycyl-N- methyl-L-leucyl-L-valyl-N-methyl-L-leucyl). Molecular Formula: C<sub>62</sub>H<sub>111</sub>N<sub>11</sub>O<sub>12</sub>. Cyclosporin A is a noncytotoxic, natural, 11 amino acid cyclic peptide used clinically as an immunosuppressant for the treatment of autoimmune and inflammatory disorders and to prevent organ rejection after transplantation. Cyclosporin acts chiefly by inhibiting T lymphocyte function, which is vital for the propagation of inflammation. Cyclosporin A does not suppress the activity of other hematopoietic cells, does not cause bone marrow suppression and has a rapid onset of action as opposed to other immunosuppressive agents. Nevertheless, Cyclosporin A - induced nephrotoxicity remains an important clinical problem, and oxidative stress has been implicated as a potential responsible mechanism.

### Product Info

<b>Amount :</b>	4 grams
<b>Purification :</b>	Greater than 99.0% as determined by RP-HPLC.
<b>Content :</b>	The Cyclosporin-A was lyophilized from a concentrated (1mg/ml) solution with no additives.
<b>Storage condition :</b>	Lyophilized Cyclosporin A although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Cyclosporin A should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

### Application Note

It is recommended to reconstitute the lyophilized Cyclosporin-A in anhydrous ethanol R at a concentration of 50mg/ml.

