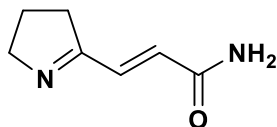


## PRODUCT DATA SHEET

### Cyclamidomycin

(Nucleoside Diphosphate Kinase (NDPK) inhibitor)



Synonyms: Desdanine, Pyracrimycin A

### Specifications

|                   |  |
|-------------------|--|
| Code No.          | : 01541  |
| CAS#              | : 35663-85-5   |
| Molecular Formula | : C <sub>7</sub> H <sub>10</sub> N <sub>2</sub> O          |
| Molecular Weight  | : 138.170  |
| Source            | : <i>Streptomyces</i> sp. MA130-A1                         |
| Appearance        | : Powder   |
| Purity            | : >98% (HPLC)  |
| Long Term Storage | : at -20 °C  |
| Solubility        | : Soluble in H <sub>2</sub> O<br>Insoluble in MeOH, Hexane |

The chemical structure was confirmed by NMR and HRMS.

### Application Notes

Cyclamidomycin is obtained from the culture filtrate of *Streptomyces* sp. MA130-A1.<sup>1)</sup> It inhibits the growth of Gram-positive and Gram-negative bacteria and shows inhibition of nucleoside diphosphate kinase of *Escherichia coli*.<sup>1-2)</sup> It inhibits plaque formation of male-specific coliphages and suppress the multiplication of both RNA phage Q $\beta$  and filamentous DNA phage f1 at the concentration of 3.13-6.26  $\mu$ g/ml.<sup>3)</sup>

### References

- 1) A new antibiotic, cyclamidomycin. Takahashi S, *et al. J Antibiot.* 1971 **24**(12) 902-903.
- 2) Cyclamidomycin (desdanine), an inhibitor of nucleoside diphosphokinase of *Escherichia coli*. Saeki T, *et al. J Antibiot.* 1972 **25**(6) 343-349.
- 3) Inhibition of coliphage multiplication and R plasmid transfer by desdanine. Tanida S, *et al. J Antibiot.* 1976 **29**(7) 754-758