

## Berninamycin A PRODUCT DATA SHEET

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| Product Name:        | Berninamycin A  |
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| Product Number:      | B046  |
| CAS Number:          | 58798-97-3  |
| Molecular Formula:   | C <sub>51</sub> H <sub>51</sub> N <sub>15</sub> O <sub>15</sub> S   |
| Molecular Weight:    | 1146.1  |
| Appearance:          | White solid   |
| Storage Conditions:  | -20°C   |
| Description:         | Berninamycin A is an antibiotic discovered in 1976 from a strain of<br>Streptomyces. Berninamycin A is a macrocyclic 'peptide' comprising atypical<br>amino acids linked to thiazole and oxazoles. Berninamycin A is closely related<br>to siomycin, a recently discovered inhibitor of oncogenic transcription factor,<br>FoxM1. |
|                      | Berninamycin A is soluble in DMF and DMSO.  |
| Mechanism of Action: | Chemically very complex, berninamycin A is an inducer of tipA, a gene that controls the bacterial transcription regulators, TipAL and TipAS, that are central to multidrug resistance.  |
| References:          | Berninamycin. I. The structure of berninamycinic acid. Liesch, J.M. et al. , J.Am.Chem.Soc. 1976, 98, 299.  |
|                      | Mode of action of berninamycin. An inhibitor of protein biosynthesis. Reusser F. Biochem. 1969, 8, 3303.  |
|                      | Identification of a chemical inhibitor of the oncogenic transcription factor Forkhead Box M1. Radhakrishnan et al. , Cancer Res. 2006, 19, 9731.  |

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