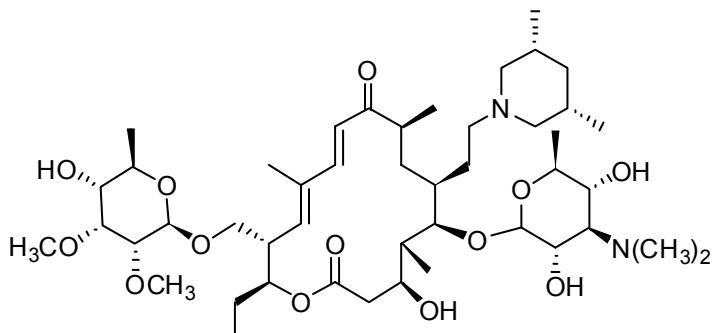


## Tilmicosin

Code: **BIA-T1323**

Pack sizes: **25 mg, 100 mg**



Synonyms : **20-Deoxy-20-(3,5-dimethylpiperidin-1-yl)-desmycosin, EL-870**

## Specifications

CAS #	: <b>108050-54-0</b>
Molecular Formula	: <b>C<sub>46</sub>H<sub>80</sub>N<sub>2</sub>O<sub>13</sub></b>
Molecular Weight	: <b>869.2</b>
Source	: <b>Semi-synthetic</b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;98%</b>
Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.</b>

## Application Notes

Tilmicosin is a semi-synthetic antibiotic derivative of desmycosin (tylosin B), a minor co-metabolite of tylosin. Desmycosin itself is prepared by the partial hydrolysis of tylosin with the loss of the mycarosyl sugar. Reductive amination of the free aldehyde of desmycosin with 3,5-dimethylpiperidine affords tilmicosin. The piperidinyl group at C20 provides a wider spectrum of antibiotic action, in particular good protection against Pasteurella in livestock.

## References

1. Synthesis and antimicrobial evaluation of 20-deoxy-20-(3,5-dimethylpiperidin-1-yl)desmycosin (Tilmicosin, EL-870) and related cyclic amino derivatives. Debono M. *et al.* J. Antibiot. **1989**, 42, 1253.