Polymyxin B, a mixture of polymyxins B1 and B2, is obtained from Bacillus polymyxa strains. Polymyxin B exhibits bactericidal activity against major multidrug-resistant gram-negative bacteria.
bacteria, most fungi and gram-positive bacteria. As basic polypeptides of about eight amino acids, polymyxins B1 and B2 have cationic detergent action on cell membranes. Moreover, polymyxin B is used for infections with gram-negative organisms, which may be nephrotoxic and neurotoxic. Polymyxin B is appropriate to treat the infections of the meninges, urinary tract, and blood stream, triggered by susceptible Pseudomonas aeruginosa strains.

In vitro: Polymyxin B elicited up-regulation of dendritic cells (DCs) maturation markers, including the increase in the expression of co-stimulatory molecule CD86 and HLA-class I and II molecules. Polymyxin B induced a progressive increase in the adhesion property of human DCs. In addition, polymyxin B triggered the activation of the ERK1/2 pathway and IκB-α/NF-κB pathways [1].

In vivo: Male bacteraemia ddY mice were subcutaneously treated with polymyxin B at a dose of 5, 10, 15 or 20 mg/kg for 7 days. Polymyxin B, in a dose-dependent fashion, improved the survival both of OU-01062- and OU-98039-infected mice. In polymyxin B-treated mice, except for 5 mg/kg polymyxin B, the viable cell counts had a tendency to reduce steadily in each concentration group. It was showed a rapid and marked decline of bacterial cell count between 3 to 6 h after infection [2].

Reference:

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.
7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com