3β-ol, and glycoside 2 was the 3-O-{[O-α-L-rhamnopyranosyl-(1→4)-O-β-D-glucopyranosyl-(1→3)]-[O-β-D-glucopyranosyl-(1→3)-O-β-D-glucopyranosyl-(1→2)]-O-β-D-glucopyranosyl-(1→4)-β-D-galactopyranoside} of (25R)-5α-spirostan-3β-ol.

LITERATURE CITED

1. T. A. Pkheidze, Izv. Akad. Nauk GSSR, Ser. Khim., 5, No. 4, 311-314 (1979).
2. C. Sannie, M. Heitz, and M. C. Lapin, C. R. Acad. Sci., Paris, 233, No. 25, 1670-1672 (1951).
3. S. Kiyosawa, N. Hutoh, T. Komori, T. Nohara, I. Hosokawa, and T. Kawasaki, Chem. Pharm. Bull., 16, No. 6, 1162-1164 (1969).
4. L. Fieser and M. Fieser, Steroids, Reinhold, New York (1959).
5. M. M. Benidze, O. D. Dzhikiya, T. A. Pkheidze, É. P. Kemertelidze, and A. S. Sashkov, Khim. Prir. Soedin., No. 4, 537-542 (1987).

MONITORING THE PURITY OF ANTIGEPOLIN WITH THE AID OF CHROMATOGRAPHY IN A THIN LAYER OF SORBENT

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Antigepolin (the ethobromide of polymethacryloyllupinine) has been recommended by the N. I. Pirogov 2nd Moscow State Medical Institute and the laboratory of the Pharmacological Institute of Bioorganic Chemistry Academy of Sciences of the Uzbek SSR as a drug for eliminating the side effect of heparin [1, 2].

Since the starting substance for the synthesis of antigepolin, methacryloyllupinine, is not an inert substance for the organism, the necessity arises for checking the purity of the drug. For the best separation of the drug and determining sensitivity we used plates with a fixed layer of type LS 5/40 μ silica gel (Czechoslovakia) and the following set of solvent systems: benzene–dioxane (9:1.5), benzene–methanol (5:2 and 5:1), acetone–dioxane–water (0.5:8:0.5), ethanol–chloroform (1:1, 2:1, and 1:2), and methanol–chloroform (2:1 and 1:2). The best separation was achieved in the methanol–chloroform (2:1) system.

Chromatography was conducted by the ascending method in a cylindrical chamber with dimensions of 80 × 200 mm. At the start line 100 μg (0.01 ml) of a solution fo the drug in ethanol was deposited with a micropipette. On the same line, at a distance of 2 cm, was deposited 1 μg (0.05 ml) of a marker solution of methacryloyllupinine in ethanol. The plate was visualized with Dragendorff reagent. The conditions of chromatography that had been selected enabled antigepolin to be distinguished from methacryloyllupinine. The minimum detectable amount of the marker was 1 μg and that of the drug 1.1 μg.

LITERATURE CITED

1. D. M. Ruzieva and G. Sh. Yunusov, in: IVth All-Union Symposium on Synthetic Polymers for Medical Purposes [in Russian], Dzerzhinsk (1979), pp. 62-63.
2. D. M. Ruzieva, U. M. Musaev, et al., Farmacol. Toksikol., 628-632 (1979).

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