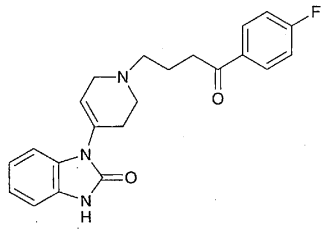
Droperidol

ドロペリドール



$C_{22}H_{22}FN_3O_2$: 379.43
1-{1-[4-(4-Fluorophenyl)-4-oxobutyl]-1,2,3,6-tetrahydropyridine-4-yl}-1,3-dihydro-2*H*-benzimidazol-2-one
[*548-73-2*]

Droperidol, when dried, contains not less than 98.0% of $C_{22}H_{22}FN_3O_2$.

Description Droperidol occurs as a white to light yellow powder.

It is freely soluble in acetic acid (100) and in chloroform, soluble in dichloromethane, slightly soluble in ethanol (95), very slightly soluble in diethyl ether, and practically insoluble in water.

It is gradually colored by light.

Identification (1) To 10 mL of a solution of Droperidol in chloroform (1 in 10,000) add 5 mL of bromophenol blue-potassium biphthalate TS, shake, and allow to stand: a yellow color develops in the chloroform layer.

(2) Put 0.03 g of Droperidol in a brown volumetric flask, and dissolve in 10 mL of 0.1 mol/L hydrochloric acid TS and ethanol (95) to make 100 mL. Transfer 5 mL of the solution to a brown volumetric flask, and add 10 mL of 0.1 mol/L hydrochloric acid TS and ethanol (95) to make 100 mL. Determine the absorption spectrum of the solution as directed under the Ultraviolet-visible Spectrophotometry, and compare the spectrum with the Reference Spectrum: both spectra exhibit similar intensities of absorption at the same wavelengths.

(3) Determine the infrared absorption spectrum of Droperidol, previously dried, as directed in the potassium bromide disk method under the Infrared Spectrophotometry, and compare the spectrum with the Reference Spectrum: both spectra exhibit similar intensities of absorption at the same wave numbers.

Melting point 141 - 145°C

Purity (1) Heavy metals—Proceed with 1.0 g of Droperidol in a platinum crucible according to Method 2, and perform the test. Prepare the control solution with 2.0 mL of Standard Lead Solution (not more than 20 ppm).

(2) Related substances—Conduct this procedure without exposure to daylight, using light-resistant vessels. Dissolve 0.050 g of Droperidol in 5 mL of dichloromethane, and use this solution as the sample solution. Pipet 1 mL of the sample solution, add dichloromethane to make exactly 100 mL, and use this solution as the standard solution. Perform the test with these solutions as directed under the Thin-layer Chromatography. Spot 10 μL each of the sample solution and the standard solution on a plate of silica gel with fluorescent indicator for thin-layer chromatography. Develop the plate with a mixture of ethyl acetate, chloroform, methanol and acetic acid-sodium acetate buffer solution, pH 4.7, (54:23:18:5) to a distance of about 15 cm, and air-dry the plate. Examine under ultraviolet light (main wavelength: 254 nm): the spots other than the principal spot from the sample solution are not more intense than the spot from the standard solution.

Loss on drying Not more than 3.0% (0.5 g, in vacuum, silica gel, 70°C, 4 hours).

Residue on ignition Not more than 0.20% (1 g, platinum crucible).

Assay Weigh accurately about 0.5 g of Droperidol, previously dried, dissolve in 50 mL of acetic acid (100), and titrate with 0.1 mol/L perchloric acid VS (potentiometric titration). Perform a blank determination, and make any necessary correction.

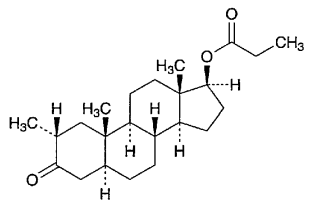
Each mL of 0.1 mol/L perchloric acid VS
= 37.943 mg of $C_{22}H_{22}FN_3O_2$

Containers and storage Containers—Tight containers.
Storage—Light-resistant.

Drostanolone Propionate

Dromostanolone Propionate

プロピオン酸ドロスタノロン



$C_{23}H_{36}O_3$: 360.53
2α-Methyl-3-oxo-5α-androstan-17β-yl propionate
[*521-12-0*]

Drostanolone Propionate, when dried, contains not less than 97.0% and not more than 103.0% of $C_{23}H_{36}O_3$.

Description Drostanolone Propionate occurs as a white to yellowish white, crystalline powder. It is odorless, or has a faint, characteristic odor.

It is very soluble in chloroform, freely soluble in diethyl ether, sparingly soluble in ethanol (95), and practically insoluble in water.

Identification (1) Dissolve 0.02 g of Drostanolone Propionate in 1 mL of ethanol (95), add 1 mL of alkaline hydroxylamine TS, allow to stand for 10 minutes, and add 1 mL of hydrochloric acid-ethanol TS and 1 mL of iron (III) chloride TS: a dark red color develops.

(2) To 0.01 g of Drostanolone Propionate add 10 mL of freshly prepared vanillin-sulfuric acid TS, and dissolve by heating in a water bath for 5 minutes: a red-purple color de-