



Protocol from analyses of Ligandrol content in capsules.

Sample:	Ligandrol capsules, Magnus Pharmaceuticals, 10 mg/capsule
Scratch Code:	AC2-MCV9TDHS
Mfg. Date:	-
Exp. Date:	-
Standard preparation:	About 10 mg of authentic Ligandrol standard was weighed and transferred into 25 ml volumetric flask. The flask was filled with 20 ml of HPLC purity methanol (MeOH), shake for 1 minute and then put to ultrasonic bath for 20 minutes. After cooling to room temperature, flask was filled to the mark with MeOH. Aliquot volume was transferred into autosampler vial and 0.2 µl was injected to HPLC-DAD instrument.
Sample preparation:	10 capsules of Ligandrol were weighed, capsules were emptied and after cleaning by flow of gaseous nitrogen, shells were weighed again. Average weight of capsule content (AWC) was calculated. Two independent weighing from inner content of capsules were transferred into 25 ml volumetric flasks. Flasks were filled with 20 ml of MeOH, shake for 1 minute and then put to ultrasonic bath for 20 minutes. After cooling to room temperature, flasks were filled to the mark with MeOH, centrifuged at 9000 RPM for 5 minutes. Aliquot volumes were transferred into autosampler vials and 0.2 µl was injected to HPLC-DAD instrument.
Method of analyses:	HPLC-DAD instrument was used for analyses of Ligandrol using external calibration with authentic standard of Ligandrol. Areas under peaks of Ligandrol at 299 nm were measured and average amounts of Ligandrol per capsule were calculated from two samples.

Calculation:

Ligandrol					
Standard	Weight (mg)	10.22	Concentration (mg/ml)	0.4088	
	Volumetric flask (ml)	25	Inj. volume (µl)	0.2	
299 nm	Purity (%)	100	Area (mAU*s)	696.63452	
	Weight of 10 cps (g)	2.81661	AWC (mg/cps)	206.574	
	Weight of 10 shells (g)	0.75087			
Sample	Sample weight (mg)	Vol. flask (ml)	Inj. volume (µl)	Area	Amount (mg/cps)
m1	202.81	25	0.2	685.60785	10.245
m2	204.43	25	0.2	681.02228	10.096
Average					10.171
STDEV					0.105
RSD (%)					1.04
Diff. (%)					1.47
% of L.C.		10 mg/cps			101.71

Conclusion:

Found amount of Ligandrol in "Ligandrol capsules, Magnus Pharmaceuticals, 10 mg/capsule, Scratch Code: AC2-MCV9TDHS" is 10.171 mg per capsule what represents 101.71% of label claim.

13.3.2018

Date

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