

KEUPAYAAN ANALISIS MAKMAL-MAKMAL DI BAWAH KKT RESIDU DRUG VETERINAR

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GROUP	NAME	MATRIX	STATUS**	TYPE OF INSTRUMENT USED	SAMPLE PREP TECHNIQUES (SPE/L-L, IAC, etc)	LOQ (µg/kg)	REPORTING/ ACTION LIMIT (µg/kg)	REFERENCES
Group A – Substances having anabolic effect and unauthorized substances								
Stilbenes								
A1	Benzestrol		AP					
A1	Dienestrol							
A1	Diethylstilbestrol							
A1	Diethylstilbestroldipropionat							
A1	Fosfestrol							
A1	Hexestrol							
A1	Mestilbol							
A1	Stilbestrol							
A1	Stilboestroldipropionat							
Thyreostat								
A2	Methyl thiouracil (MTU)		KIV depending on client request and current issues					
A2	Propyl thiouracil (PTU)							
A2	Phenyl thiouracil (PhTU)							
A2	Mercaptoimidazole (MI)							
A2	Tapazole (TAP)							
A2	Mercaptobenzimidazole (MBI)							
Steroids								
A3	Boldenone							
A3	Flumethasone							
A3	Betamethasone							
A3	Dexamethasone							
A3	Nandrolone							
A3	Methandienone	Animal tissue	MD	LC-MS/MS	SPE			WATERS Application Notes
A3	Nandrolone phenylpropionate							
A3	Nortestosterone							
A3	Progesterone							
A3	Stanozolol							
A3	Trenbolone							
A3	Testosterone							
A3	Estradiol							
A3	Ethinyl estradiol							
A3	Flugestone							
A3	Medroxyprogesterone acetate							
A3	Meggestrol acetate							
A3	Methyl testosterone							
Resorcylic acid lactones								
A4	Zeranol		KIV depending on client request and current issues					
A4	Zearalenone							
A4	Zearalenol							
Beta-agonists								
A5	Clenbuterol		√ (A)					
A5	Salbutamol	Animal tissue, Feed	√ (A)	GC-MS	IAC	0.5	0.5	Manual IAC,Randox
A5	Terbutaline		√ (A)					
A5	Ractopamine		√ (NA)	HPLC-FD	SPE	2.0	2.0	USFDA
A5	Clenpenterol		KIV depending on client request and current issues					
A5	HO-CH ₂ -clenbuterol							
A5	Isoxsuprine							
A5	Mabuterol							
A5	Mapenterol							
A5	Brombuterol							
A5	Cimaterol							
A5	Cimbuterol							
A5	Tulobuterol							
A5	Zilpaterol							

Compounds included in Annex IV to Council Regulation (EEC) No 2377/90

Chloramphenicol								
A6	Chloramphenicol	Animal tissue,	√ (A)	LC-MS/MS	L-L	0.05	0.05	DARDNI, MKAV
		Honey, Egg						
		Feed	√ (NA)					
Nitrofurans								
A6	AOZ							
A6	AMOZ	Animal tissue,	√ (A)	LC-MS/MS	L-L	0.2	0.2	DARDNI, MKAV
A6	AHD	Honey, Egg						
A6	SEM							
Nitroimidazoles								
A6	Dimetridazole							
A6	Iprnidazole	Animal tissue	MD	LC-MS/MS	SPE			Jurnal of AOAC
A6	Metronidazol	Feed	NA					
A6	Ronidazole							
A6	HMMNI							
A6	Iprnidazole-OH							
A6	Metronidazol-OH							
Group B – Veterinary drugs and contaminants								
Antibacterials								
Beta-Lactam								
B1	Ampicillin							
B1	Amoxicillin							
B1	Cloxacillin	Fish tissue	√ (A)	LC-MS/MS	L-L	10	10	USFDA, AFSSA
B1	Oxacillin							
B1	Penicillin G							
B1	Penicillin V							
B1	Cephalexin							
B1	Cephapirin							
B1	Dicloxacillin							
Macrolide								
B1	Erythromycin		KIV depending on clients request and current issues					
B1	Josamicin							
B1	Oleandomycin							
B1	Tilmicosin							
B1	Tylosin							
B1	Spiramycin							
B1	Tilmicosin							
Quinolone								
B1	Norfloxacin							
B1	Ciprofloxacin							
B1	Danofloxacin	Animal tissue	MD	LC-MS/MS	SPE			Rapid Comm. In Mass Spec.
B1	Enrofloxacin							
B1	Oxolinic Acid							
B1	Difloxacin							
B1	Flumequine							
B1	Nalidixic acid							
B1	Cinoxacin							
B1	Ofloxacin							
B1	Enoxacin							
B1	Pipemidic acid							
B1	Sarafloxacin							
Sulphonamides								
B1	Sulfadiazine							
B1	Sulfamerazine							
B1	Sulfamethazine							
B1	Sulfamethizole	Animal tissue,	MD	LC-MS/MS	Honey - SPE			AFSSA
B1	Sulfapyridine	Honey, Feed			Feed - Direct			
B1	Sulfamethoxyypyridazine							
B1	Sulfathiazole							
B1	Sulfisomidine							
Tetracyclines								
B1	Chlortetracycline							
B1	Oxytetracycline	Tissue	MD	LC-MS/MS	Tissue - SPE			Science Direct
B1	Tetracycline	Feed, Citrus fruit	NA		Feed, Citrus - Direct			
B1	Doxycycline							
B1	4-epiTC, 4-epiOTC4-4epiCTC							

Antihelmintics							
B2a	Abamectin						
B2a	Albendazol						
B2a	Avermectin						
B2a	Doramectin						
B2a	Febantel						
B2a	Fenbendazol			KIV			
B2a	Flubendazol			(depending on			
B2a	Ivermectin			clients request)			
B2a	Levamisol						
B2a	Mebendazol						
B2a	Oxfendazol						
B2a	Thiabendazol						
Anticoccidials							
B2b	Lasalocid						
B2b	Maduramycin						
B2b	Monensin			KIV			
B2b	Narasin			(depending on			
B2b	Nicarbazine			client request)			
B2b	Salinomycin						
B2b	Semduramycin						
Non steroidal anti-inflammatory drugs (NSAIDs)							
B2e	Carprofen			KIV			
	Ketoprofen			(depending on			
	Phenylbutazone			clients request)			
	Salicylic acid						
Other pharmacologically active substances							
B2f	Carbadox			KIV			
B2f	Olaquinox			(depending on			
				clients request)			

Note :

**Status : accredited/not accredited/under development/under action plan

- √(A) : Existing capabilities, accredited
- √(NA) : Existing capabilities, not accredited
- MD : Under method development
- AP : Under action plan