



Antipsychotics

Antipsychotic medications (neuroleptics) are used for the treatment of psychosis, mainly schizophrenia and manic depression (bipolar disorder). They reduce symptoms such as hallucinations, delusions, and paranoia, and can also be used to help severe anxiety or depression. Antipsychotic medications have been available for the treatment of psychosis for over half a century. The first being chlorpromazine (Thorazine), introduced in the early 1950's. The list now extends to over 20 different compounds.



What are Antipsychotics?

Antipsychotics act by blocking dopamine receptors in the brain and interfering with dopaminergic transmission.

Side effects include movement disorders similar to Parkinson's disease, such as shaking/tremor, involuntary body movements and inner restlessness. These are referred to as extrapyramidal symptoms, and can be controlled with anticholinergic drugs such as orphenadrine and procyclidine. Other side effects include lethargy, weight gain and sexual dysfunction. Longer term there is increased risk of developing type 2 diabetes, high blood pressure, heart problems and osteoporosis.

Antipsychotics are may be classified as typical or atypical, or first and second generation respectively. Typical antipsychotics include; Chlorpromazine, Haloperidol, Pimozide, Trifluoperazine, and Sulpiride. Atypical include; Amisulpride, Aripiprazole, Clozapine, Olanzapine, Quetiapine and Risperidone. Atypical antipsychotics, are useful in patients that do not respond to treatment with typical antipsychotics. They cause less extrapyramidal side effects and have a greater efficacy to treat negative symptoms. Atypical antipsychotics also block dopamine, but to a lesser degree than the older drugs. They also work on serotonin.

Some antipsychotics are available in depot form, i.e. Haloperidol decanoate, Flupenthixol decanoate, Fluphenazine decanoate, Pipothiazine palmitate and Zuclopenthixol decanoate. These are injected into muscle every 2 to 4 weeks and release slowly over time. This prevents patients forgetting to take their medication.

Side effects include:

**MOVEMENT
DISORDERS SIMILAR
TO PARKINSON'S
DISEASE**



Other side effects include:

LETHARGY



WEIGHT GAIN



**SEXUAL
DYSFUNCTION**



**TYPE 2 DIABETES,
HIGH BLOOD
PRESSURE, HEART
PROBLEMS AND
OSTEOPOROSIS**





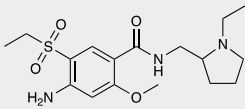
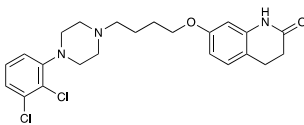
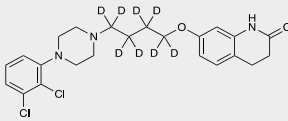
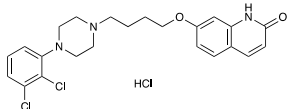
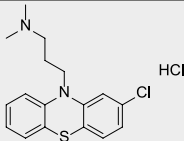
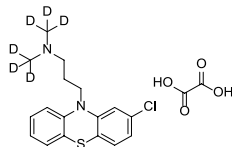
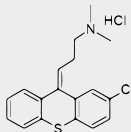
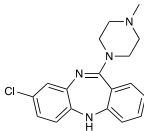
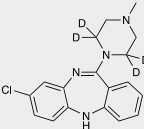
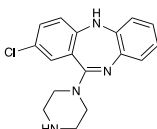
What does Chiron offer?

Chiron offers a range of native and isotopic labelled reference materials to support antipsychotic therapeutic drug monitoring and compliance assessment.



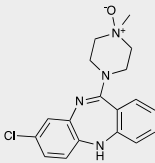
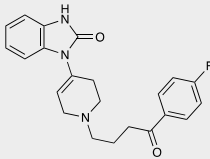
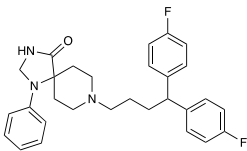
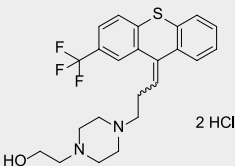
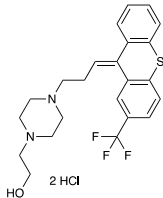
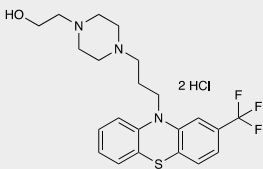
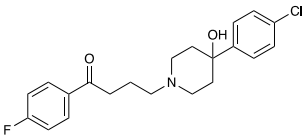
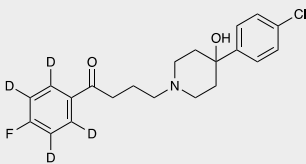
Antipsychotics product listing

ISO 17034
ISO/IEC 17025
ACCREDITED
PRODUCER

Chiron No.	Name	Structure	CAS
Amisulpride			
10349.17	(±)-Amisulpride		71675-85-9
Aripiprazole			
2305.23	Aripiprazole		129722-12-9
9653.23	Aripiprazole-d8 (butyl-d8)		1089115-04-7
11004.23	Dehydroaripiprazole hydrochloride		1008531-60-9
Chlorpromazine			
10350.17	Chlorpromazine hydrochloride		69-09-0
10841.17	Chlorpromazine-d6 oxalate (N,N-dimethyl-d6)		1208197-23-9
Chlorprothixene			
14510.18	Chlorprothixene hydrochloride		6469-93-8
Clozapine			
9275.18	Clozapine		5786-21-0
9406.18	Clozapine-d4 (4-methylpiperazinyl-2,2,6,6-d4)		204395-52-8
10807.17	Norclozapine (N-Desmethyl Clozapine)		6104-71-8

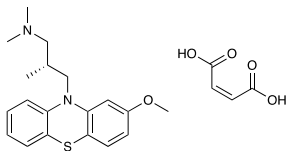
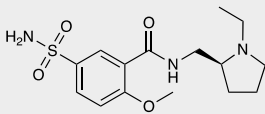
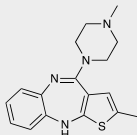
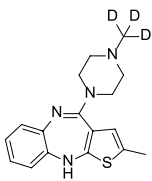
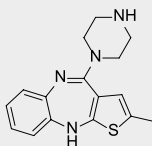
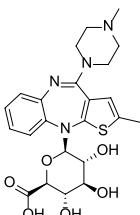
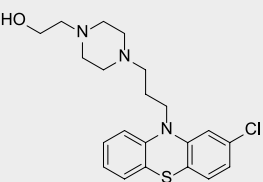
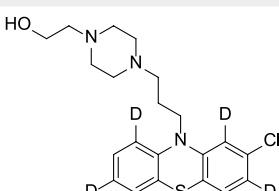
Antipsychotics product listing

ISO 17034
ISO/IEC 17025
ACCREDITED
PRODUCER

Chiron No.	Name	Structure	CAS
10808.18	Clozapine N-oxide (4-oxido-piprazinyl)		34233-69-7
Droperidol			
11983.22	Droperidol		548-73-2
Fluspirilene			
9748.29	Fluspirilene		1841-19-6
Flupentixol			
10358.23	Flupentixol dihydrochloride (cis+trans)		2413-38-9
10712.23	cis-(Z)-Flupentixol dihydrochloride		51529-01-2
Fluphenazine			
11163.22	Fluphenazine dihydrochloride		146-56-5
Haloperidol			
10345.21	Haloperidol		52-86-8
10359.21	Haloperidol-d4 (4-chlorophenyl-d4)		1189986-59-1

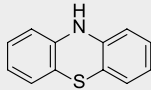
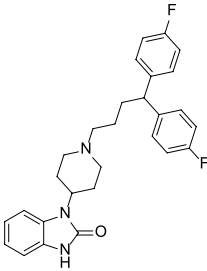
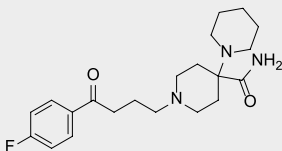
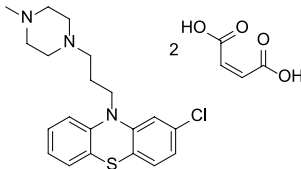
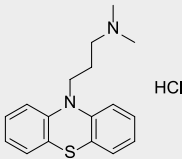
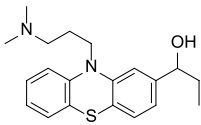
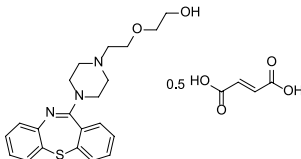
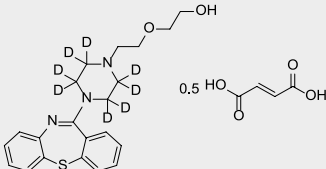
Antipsychotics product listing

ISO 17034
ISO/IEC 17025
ACCREDITED
PRODUCER

Chiron No.	Name	Structure	CAS
Levomepromazine			
11807.23	Levomepromazine maleate		7104-38-3
Levosulpiride			
12740.15	Levosulpiride ((S)-(-)-Sulpiride)		23672-07-3
Olanzapine			
3761.17	Olanzapine		132539-06-1
9766.17	Olanzapine-d3 (4-methyl-d3)		786686-79-1
11913.16	N-Demethylolanzapine		161696-76-0
3924.23	Olanzapine 10-N-β-D-glucuronide		186792-80-3
Perphenazine			
9749.21	Perphenazine		58-39-9
9914.21	Perphenazine-d4 (phenothiazine-1,3,7,9-d4)		155593-75-2

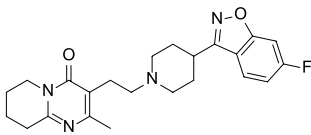
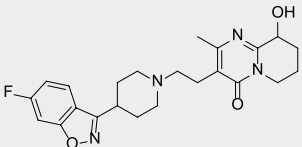
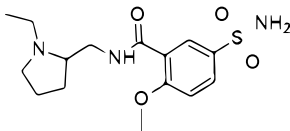
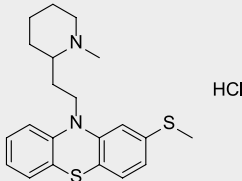
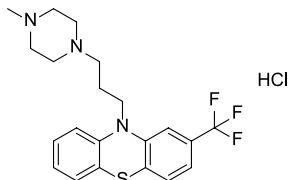
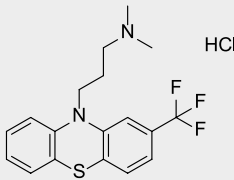
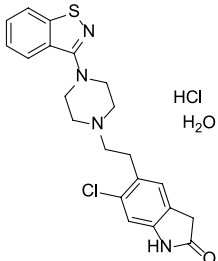
Antipsychotics product listing

ISO 17034
ISO/IEC 17025
ACCREDITED
PRODUCER

Chiron No.	Name	Structure	CAS
Phenothiazine			
13859.12	Phenothiazine		92-84-2
Pimozide			
14255.28	Pimozide		2062-78-4
Pipamperone			
15312.21	Pipamperone		1893-33-0
Prochloroperazine			
10856.28	Prochloroperazine dimaleate		84-02-6
Promazine			
11164.17	Promazine hydrochloride		53-60-1
11989.20	2-(1-Hydroxypropyl)promazine		110080-35-8
Quetiapine			
10835.46	Quetiapine hemifumarate		111974-72-2
13187.46	Quetiapine-d8 hemifumarate		1435938-24-1

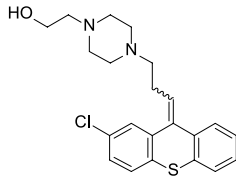
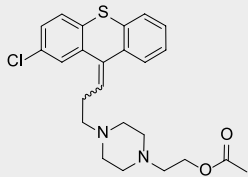
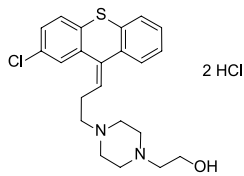
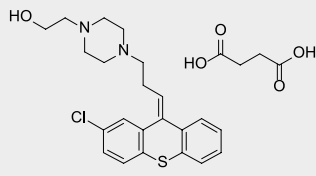
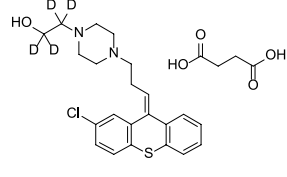
Antipsychotics product listing

ISO 17034
ISO/IEC 17025
ACCREDITED
PRODUCER

Chiron No.	Name	Structure	CAS
Risperidone			
10337.23	Risperidone		106266-06-2
10338.23	(9R)-9-Hydroxyrisperidone (Paliperidone)		144598-75-4
Sulpiride			
14749.15	(±)-Sulpiride		15676-16-1
Thioridazine			
11419.21	Thioridazine hydrochloride		130-61-0
Trifluoperazine			
11192.21	Trifluoperazine dihydrochloride		440-17-5
Triflupromazine			
11195.18	Triflupromazine hydrochloride		1098-60-8
Ziprasidone			
11901.21	Ziprasidone hydrochloride monohydrate		138982-67-9

Antipsychotics product listing

ISO 17034
ISO/IEC 17025
ACCREDITED
PRODUCER

Chiron No.	Name	Structure	CAS
Zuclopenthixol			
10284.22	Zuclopenthixol (cis+trans)		982-24-1
10285.24	Zuclopenthixol acetate (cis+trans)		85721-05-7
14033.22	cis-(Z)-Zuclopenthixol dihydrochloride		633-59-0
10713.26	cis-(Z)-Zuclopenthixol succinate		53772-83-1 (free base)
10383.22	cis-(Z)-Zuclopenthixol-d4 succinate		1246833-97-5

Antipsychotic mixes

S-4965-100-ME Antipsychotic Mix 1 : 12 components in 1 mL methanol			
Chiron No.	Name	CAS	Concentration / Solvent
10349.17	Amisulpride	71675-85-9	100 µg/mL each
10793.21	Biperiden hydrochloride (mixture of diastereomers)	1235-82-1	
10350.17	Chlorpromazine hydrochloride	69-09-0	
9275.18	Clozapine	5786-21-0	
10345.21	Haloperidol	52-86-8	
10338.23	9-Hydroxyrisperidone	144598-75-4	
11913.16	N-Demethylolanzapine	161696-76-0	
10807.17	Norclozapine	6104-71-8	
3761.17	Olanzapine	132539-06-1	
10835.46	Quetiapine hemifumarate	111974-72-2	
10337.23	Risperidone	106266-06-2	
11419.21	Thioridazine hydrochloride	130-61-0	

S-4965A-100-ME Antipsychotic Mix 1 : 11 components in 1 mL methanol			
Chiron No.	Name	CAS	Concentration / Solvent
10349.17	Amisulpride	71675-85-9	100 µg/mL each
10793.21	Biperiden hydrochloride (mixture of diastereomers)	1235-82-1	
10350.17	Chlorpromazine hydrochloride	69-09-0	
9275.18	Clozapine	5786-21-0	
10345.21	Haloperidol	52-86-8	
3761.17	Olanzapine	132539-06-1	
10835.46	Quetiapine hemifumarate	111974-72-2	
10337.23	Risperidone	106266-06-2	
11419.21	Thioridazine hydrochloride	130-61-0	
11901.21	Ziprasidone hydrochloride monohydrate	138982-67-9	
2305.23	Aripiprazole	129722-12-9	

S-4932-25µM-ME Antipsychotic & Antidepressant Mix 1 : 7 components in 1 mL methanol			
Chiron No.	Name	CAS	Concentration / Solvent
10345.21	Haloperidol	52-86-8	25µM
3761.17	Olanzapine	132539-06-1	
11913.16	N-Desmethylolanzapine	161696-76-0	
10337.23	Risperidone	106266-06-2	
10338.23	9-Hydroxyrisperidone	144598-75-4	
9288.17	Mirtazapine	85650-52-8	
11189.16	Desmethyilmirtazapine hydrochloride	61337-68-6 (free base)	

S-4983-ASS-ME Antipsychotic & Antidepressant Mix 2 : 6 components in 1 mL methanol			
Chiron No.	Name	CAS	Concentration / Solvent
11163.22	Fluphenazine dihydrochloride	146-56-5	10 µmol/L (4.38 µg/mL)
10712.23	cis-(Z)-Flupentixol dihydrochloride	51529-01-2	10 µmol/L (4.35 µg/mL)
9749.21	Perphenazine	58-39-9	10 µmol/L (4.04 µg/mL)
10284.22	Zuclopenthixol (cis+trans)	982-24-1	20 µmol/L (8.02 µg/mL)
9284.17	(+)-(1S,4S)-Sertraline hydrochloride	79559-97-0	100 µmol/L (30.62 µg/mL)
12000.16	rac-Norsertraline hydrochloride	91797-57-8	100 µmol/L (29.22 µg/mL)

S-4983A-ASS-ME Antipsychotic & Antidepressant Mix 2A : 5 components in 1 mL methanol			
Chiron No.	Name	CAS	Concentration / Solvent
10712.23	cis-(Z)-Flupentixol dihydrochloride	51529-01-2	10 µmol/L (4.35 µg/mL)
9749.21	Perphenazine	58-39-9	10 µmol/L (4.04 µg/mL)
10284.22	Zuclopenthixol (cis+trans)	982-24-1	20 µmol/L (8.02 µg/mL)
9284.17	(+)-(1S,4S)-Sertraline hydrochloride	79559-97-0	100 µmol/L (30.62 µg/mL)
12000.16	rac-Norsertraline hydrochloride	91797-57-8	100 µmol/L (29.22 µg/mL)

Antipsychotic mixes

S-5204-25µM-ME Antipsychotic & Antidepressant Mix 3 : 8 components in 1 mL methanol			
Chiron No.	Name	CAS	Concentration / Solvent
10345.21	Haloperidol	52-86-8	25µM
3761.17	Olanzapine	132539-06-1	
11913.16	N-Desmethyloanzapine	161696-76-0	
10337.23	Risperidone	106266-06-2	
10338.23	(9RS)-9-Hydroxyrisperidone	144598-75-4	
9288.17	Mirtazapine	85650-52-8	
12043.16	Desmethyloanzapine dihydrochloride	61337-68-6 (freebase)	
11811.18	Vortioxetine hydrochloride	960203-28-5	
S-5204A-ASS-ME Antipsychotic & Antidepressant Mix 3A : 8 components in 1 mL methanol			
Chiron No.	Name	CAS	Concentration / Solvent
10345.21	Haloperidol	52-86-8	25 µM
3761.17	Olanzapine	132539-06-1	25 µM
11913.16	N-Desmethyloanzapine	161696-76-0	25 µM
10337.23	Risperidone	106266-06-2	25 µM
10338.23	(9RS)-9-Hydroxyrisperidone	144598-75-4	25 µM
9288.17	Mirtazapine	85650-52-8	25 µM
12043.16	Desmethyloanzapine dihydrochloride	61337-68-6 (freebase)	25 µM
11811.18	Vortioxetine hydrochloride	960203-28-5	125 µM

Accuracy controls



These accuracy controls were originally prepared as proficiency testing material for the GTFCh by ARVECON GmbH. Target values are batch specific and the consensus values obtained from the trial. No restrictions were placed on sample preparation and analytical methodology. Quantitative analyses were performed by the participants using HPLC and LC/MS/MS. The target values are released by the coordinator of the proficiency testing of the GTFCh.

Please enquire for availability and current batch target values.

ACQ-TDMC	TDM - Neuroleptics in serum	6 x 4 ml	Serum (freeze dried)
	Aripiprazole		
	Flupentixol (cis)		
	Fluphenazine		
	Haloperidol		
	Sertindol		
	Sulpiride		
	Zotepine		
ACQ-TDMA	TDM - Neuroleptics in serum	6 x 3 ml	Serum (freeze dried)
	Clozapine		
	Desmethyloanzapine		
	Olanzapine		
	Quetiapine		
	Amisulpride		
	Perazine		
	Risperidone		
	9-OH-Risperidone		
	Ziprasidone		
	Citalopram		



For ordering and information about prices and delivery in your country, please contact your local distributor:



Your quality is our business

Chiron AS | Stiklestadveien 1 | N-7041 | Trondheim | Norway

 **+47 73 87 44 90**  **sales@chiron.no**  **www.chiron.no**    



BMF 84 | v2 | 08/22