

List of Validated Bioanalytical Methods at XBL

Compound (Metabolite)	Platform	Matrix	Sample Volume	Calibration Range
1'-Hydroxybufuralol (OH-buf)	LC/MS/MS	Microsome	0.2 mL	1-200 nM
1'-Hydroxymidazolam (OH-Mid)	LC/MS/MS	Microsome	0.2 mL	10-2000 nM
4'-Hydroxydiclofenac (OH-Dic)	LC/MS/MS	Microsome	0.2 mL	50-10000 nM
4'-Hydroxymephenytoin (OH-Mep)	LC/MS/MS	Microsome	0.2 mL	50-10000 nM
6-Hydroxychlorzoxazone (OH-Chl)	LC/MS/MS	Microsome	0.2 mL	50-10,000 nM
6 α -Hydroxypaclitxel (OH-Pac)	LC/MS/MS	Microsome	0.2 mL	5-1000 nM
6 β -Hydroxytestosterone (OH-Tes)	LC/MS/MS	Microsome	0.2 mL	100-20,000 nM
Abamectin	LC/MS/MS	Sheep Plasma	200 μ L	0.5-300 ng/mL
Acetaminophen (Ace)	LC/MS/MS	Microsome	0.2 mL	50-10000 nM
Albuterol	LC/MS/MS	Human Plasma	0.4mL or 0.45mL	2-600 pg/mL or 2-1000 pg/mL
Amprenavir	LC/MS/MS	Rat Plasma	50 μ L	10 - 5000 ng/mL
Antipyrine	LC/MS/MS	Buffer (HBSS)	100 μ L	50-12500 nM
Atenolol	LC/MS/MS	Buffer (HBSS)	100 μ L	5-2500 nM
Atovastatin, 2-OH atovastatin, 4-OH atovastatin	LC/MS/MS	Human Plasma	100 μ L	0.25-100 ng/mL
Beclomethasone	LC/MS/MS	Rat Plasma	100 μ L	0.5-200 ng/mL
Beclomethasone Dipropionate and Beclomethasone-17-Propionate	LC/MS/MS	Human Plasma	500 μ L	10-2500 (BDP), 20-5000 pg/mL (17-BMP)
Beclomethasone Dipropionate and Beclomethasone-17-Propionate	LC/MS/MS(Xevo TQ-S)	Human Plasma	200 μ L	10-2500 (BDP), 20-5000 pg/mL (17-BMP)
Budesonide	LC/MS/MS	Human Plasma	500 μ L	10-2000 pg/mL
Buprenorphine/Norbuprenorphine	LC/MS/MS	Human Plasma	100 μ L	25-1250/50-2500 pg/mL
Buprenorphine/Norbuprenorphine	LC/MS/MS	Human Urine	200 μ L	50-2500/100-5000 pg/mL
C4	LC/MS/MS	Human Plasma	100 μ L	50-50,000 pg/mL
Caffeine and paraxanthine	LC/MS/MS	Human Plasma	50 μ L	25-10,000 ng/mL
Calcipotriene	LC/MS/MS	Human Plasma	100 μ L	1-500 ng/mL
Carbamazepine and Carbamazepine-10,11-epoxide	LC/MS/MS	Human Plasma	50 μ L	20-5,000 ng/mL for carbamazepine, and 10-2,500 ng/mL for Carbamazepine-10,11-epoxide
Citalopram	LC/MS/MS	Human Plasma	1 mL	0.2-100 ng/mL

Compound (Metabolite)	Platform	Matrix	Sample Volume	Calibration Range
Clopidogrel/Clopidogrel Carboxylic Acid/Aspirin	LC/MS/MS	Human Plasma	200 µL	0.5-100 ng/mL /10-2000 ng/mL/monitor
Clozapine	LC/MS/MS	Human Plasma	1 mL	0.2-20 ng/mL
Cyclosporine A	LC/MS/MS	Human Blood	50 µL	5 - 1000 ng/mL
Decitabine	LC/MS/MS	Human Plasma	200 µL	1-100 ng/mL
Desirudin	LC/MS/MS	Human Plasma	500 µL	5-3000 ng/mL
Dexamethasone	LC/MS/MS	Human Plasma	50 µL	1-1000 ng/mL
Dextromethorphan and Dextrorphan	LC/MS/MS	Human Plasma	50 µL	0.1 - 50 ng/mL for Dextromethorphan, 1 - 500 ng/mL for Dextrorphan
Dextromethorphan and Dextrorphan	LC/MS/MS	Human Plasma	50 µL	0.1 - 50 ng/mL
Digoxin	LC/MS/MS	Human Plasma	250 µL	10-5000 pg/mL
Digoxin	LC/MS/MS	Human Urine	250 µL	1-500 ng/mL
Digoxin	LC/MS/MS	Buffer (HBSS)	100 µL	10-10000 nM
Diltiazem, N-Desmethyl Diltiazem and Desacetyl Diltiazem	LC/MS/MS	Human Plasma	50 µL	2 - 1000 ng/mL for Diltiazem, 0.5 - 250 ng/mL for N-Desmethyl Diltiazem and Desacetyl Diltiazem
Docetaxel Docetaxel M2 and Docetaxel M4	LC/MS/MS	Human Plasma	50 µL	0.2-200 ng/mL
Efavirenz	LC/MS/MS	Human Plasma	50 µL	10 - 5000 ng/mL
Eptifibatide	LC/MS/MS	Human Plasma	200 µL	2.5-500 ng/mL
Florfenicol Amine	LC/MS/MS	Beef Muscle	NA	0.025 to 0.5 ppm
Fluconazole	LC/MS/MS	Human Plasma	50 µL	10-5000 ng/mL
Fluticasone Propionate	LC/MS/MS	Human Plasma	1 mL	3~1000 pg/mL
Fluticasone Propionate	LC/MS/MS	Human Plasma	1 mL	3~100 pg/mL
Fluticasone Propionate	LC/MS/MS(Xevo TQ-S)	Human Plasma	150 µL	2 - 200 pg/mL
Fluticasone Propionate	LC/MS/MS(Xevo TQ-S)	Human Plasma	500 µL	0.4 - 200 pg/mL
Fluticasone Propionate	LC/MS/MS	Human Plasma	0.6 mL	1 - 200 pg/mL
Fluvoxamine	LC/MS/MS	Human Plasma	50 µL	0.5-500 ng/mL
Formoterol	LC/MS/MS	Human Urine	2 mL(Method I), 1mL(Method II)	10~1250 pg/mL
Formoterol	LC/MS/MS	Human Plasma	500 µL	0.4-100 pg/mL
Formoterol	LC/MS/MS	Human Plasma	500 µL	0.4~40 pg/mL

Compound (Metabolite)	Platform	Matrix	Sample Volume	Calibration Range
Glimepiride	LC/MS/MS	Human Plasma	1 mL	0.2~100 ng/mL
Glipizide	LC/MS/MS	Human Plasma	400 µL	2~500 ng/mL
Glucose	LC/MS/MS	Human Plasma	100 µL	0.1 - 5 mg/mL
Guanfacine	LC/MS/MS	Human Plasma	500 µL	0.05-20 ng/mL
Hydroxybupropion (OH-Bup)	LC/MS/MS	Microsome	0.2 mL	5-1000 nM
Iohexol	LC/MS/MS	Human Serum	50 µL	0.5 - 250 mg/mL
Irinotecan SN-38	LC/MS/MS	Mouse, Rat Plasma	NA	0.05-25 ng/mL for low range and 50-15000 ng/mL for high range
Ketoconazole	LC/MS/MS	Human Plasma	50 µL	20-5,000 ng/mL
Ketorolac (R&S)	LC/MS/MS	Human Plasma	500 µL	10-1000 ng/mL (Ketorolac) 0.1~50 ng/mL (ORG-41793)
Labetalol	LC/MS/MS	Buffer (HBSS)	100 µL	50-10000 nM
Leuprolide	LC/MS/MS	Dog Serum	200 µL	0.1-50 ng/mL
Leuprolide	LC/MS/MS	Rat Serum	100 µL	0.1~50 ng/mL
Leuprolide	LC/MS/MS	Human Serum	500 µL/100 µL	0.05~50 ng/mL/0.1~50 ng/mL
Leuprolide	LC/MS/MS	Rat Serum	100 µL	0.1 - 50 ng/mL
Lisdexamfetamine	LC/MS/MS	Human Plasma	100 µL	1-250 ng/mL for Lisdexamfetamine, 2-500 ng/mL for Amphetamine
Metformin	LC/MS/MS	Human Plasma	100 µL	5 - 2500 ng/mL
Metformin	LC/MS/MS	Human Urine	100 µL	5 - 2500 ng/mL
Metformin	LC/MS/MS	Human Urine	50 µL	5 - 2500 mg/mL
Methotrexate, 7 Hydroxy Methotrexate	LC/MS/MS	Human Urine	100 µL	1~500 ng/mL
Midazolam and 1-OH Midazolam	LC/MS/MS	Human Plasma	100 µL	0.1 - 20 ng/mL
Moxifloxacin	LC/MS/MS	Human Plasma	50 µL	20-4000 ng/mL
Naftifine	LC/MS/MS	Human Plasma	200 µL	0.02-10 ng/mL
Naftifine	LC/MS/MS	Mini-Pig Plasma	200 µL	0.05-35 ng/mL
Naftifine	LC/MS/MS	Human Urine	200 µL	1-1000 ng/mL
N-desethylamodiaquine	LC/MS/MS	Microsome	100 µL	25-10000 nM
Nebivolol (chiral)	LC/MS/MS	Rat Plasma	100 µL	0.05-20 ng/mL
Nebivolol (chiral)	LC/MS/MS	Mouse Plasma	100 µL	0.05-20 ng/mL
Nebivolol (chiral)	LC/MS/MS	Dog Plasma	100 µL	0.05-20 ng/mL

Compound (Metabolite)	Platform	Matrix	Sample Volume	Calibration Range
Nebivolol (chiral)	LC/MS/MS	Guinea Pig Plasma	100 µL	0.05-20 ng/mL
Nebivolol (Total)	LC/MS/MS	Mouse Plasma	100 µL	0.05-20 ng/mL
Nebivolol (Total)	LC/MS/MS	Rat Plasma	100 µL	0.05-20 ng/mL
Nebivolol (Total)	LC/MS/MS	Dog Plasma	100 µL	0.05-20 ng/mL
Nebivolol (Total)	LC/MS/MS	Guinea Pig Plasma	100 µL	0.05-20 ng/mL
octreotide	LC/MS/MS	Rat Plasma	200 µL	0.05-25 ng/mL
Omeprazole and 5-OH Omeprazole	LC/MS/MS	Human Plasma	50 µL	2 - 1000 ng/mL
Ondansetron	LC/MS/MS	Human Plasma	1 mL	0.1-100 ng/mL
Orntide	LC/MS/MS	Human Serum	200 µL	0.1-50 ng/mL
Orntide	LC/MS/MS	Rat Serum	100 µL	1-500 ng/mL
Oxycodone/Noroxycodone/oxymorphone/noroxymorphone	LC/MS/MS	Human Plasma	250 µL	0.1-10 ng/mL/0.1-10 ng/mL/0.02-2 ng/mL/0.1-10 ng/mL
Oxytetracycline	LC/MS/MS	Tissues Bovine, Sheep	NA	0.5-120 ng/mL
Paclitaxel	LC/MS/MS	Human Plasma	100 µL	1-250 ng/mL
Paclitaxel	LC/MS/MS	Rat Plasma	100 µL	01214: 1-250 ng/mL; 03203: 0.2-100 ng/mL and 0.2-2000 ng/mL
Paclitaxel	LC/MS/MS	Human Plasma	100 µL	1-1000 ng/mL
Paclitaxel	LC/MS/MS	Human Plasma	100 µL	1-1000 ng/mL
Paclitaxel, 6- α - and 3'-p-hydroxypaclitaxel	LC/MS/MS	Human Plasma	200 µL	1-200/0.25-50/0.25-50 ng/mL
Paliperidone	LC/MS/MS	Human Plasma	100 µL	0.1-40 ng/mL
Palmitic Acid, Linoleic Acid, and Oleic Acid	LC/MS/MS	Human Plasma	50 µL	10-500 µg/mL
p-Aminohippuric Acid	LC/MS/MS	Human Urine	50 µL	0.2 - 100 mg/mL
p-Aminohippuric Acid	LC/MS/MS	Human Plasma	50 µL	0.2 - 100 mg/mL
Paroxetine	LC/MS/MS	Human Plasma	200 µL	0.1-50 and 1-500 ng/mL
Prazosin	LC/MS/MS	Buffer (HBSS)	100 µL	5-2500 nM
Propion and Naltrexone	LC/MS/MS	Human Plasma	50 µL	0.2-100 ng/mL
Pyrimethamine	LC/MS/MS	Human Plasma	100 µL	1-200 ng/mL
Quinidine	LC/MS/MS	Buffer (HBSS)	100 µL	10-10000 nM
Repaglinide	LC/MS/MS	Human Plasma	200 µL	0.02 - 10 ng/mL

Compound (Metabolite)	Platform	Matrix	Sample Volume	Calibration Range
Ribavirin	LC/MS/MS	Human Plasma	100 µL	5-500 ng/mL
Rifampicin	LC/MS/MS	Human Plasma	50 µL	20 - 4000 ng/mL
Risperidone and 9-OH Risperidone	LC/MS/MS	Rat Plasma	100 µL	0.1-50 ng/mL
Risperidone and 9-OH Risperidone	LC/MS/MS	Human Plasma	100 µL	0.1-50 ng/mL
Salmeterol	LC/MS/MS	Human Plasma	500 µL	4-800 pg/mL
Salmeterol	LC/MS/MS(Xevo TQ-S)	Human Plasma	200 µL	4 - 800 pg/mL
Salmeterol	LC/MS/MS(Xevo TQ-S)	Human Plasma	500 µL	0.5 - 250 pg/mL
Sertaconazole	LC/MS/MS	Rat Plasma	100 µL	0.01-7.5 ng/mL
Sertraline and venlafaxine	LC/MS/MS	Human Plasma	50 µL	1-500 ng/mL
Sulphasalazine and Sulfapyridine	LC/MS/MS	Human Plasma	50 µL	10.0 to 10,000 ng/mL for Sulphasalazine, and 10.0 to 5,000 ng/mL for Sulfapyridine
Telbivudine	LC/MS/MS	Human Plasma	100 µL	10-5000 ng/mL
Terbinafine	LC/MS/MS	Human Plasma	1 mL	0.1-50 ng/mL
Testosterone	LC/MS/MS	Rat serum	100 µL	50-10,000 pg/mL
Thalidomide	LC/MS/MS	Monkey, Rabbit Plasma	100 µL	5-1000 ng/mL
Tin-Mesoporphyrin	LC/MS/MS	Human Plasma	100 µL	5-500 ng/mL
Tin-Mesoporphyrin	LC/MS/MS	Rabbit Plasma	100 µL	10-5000 ng/mL
Tin-Mesoporphyrin	LC/MS/MS	Rat Plasma, Dog Plasma	100 µL (dog) 50µL (rat)	10~5000 ng/mL
Tin-Mesoporphyrin	LC/MS/MS	Human, Dog, Rat Plasma	100 µL	5-1000 ng/mL for human, 5-50000 ng/mL for dog and rat
Tiotropium Bromide	LC/MS/MS	Human Plasma	500 µL	0.2- 100 pg/mL
Tiotropium Bromide	LC/MS/MS	Human Plasma	500 µL	0.5 - 250 pg/mL
Tiotropium Bromide	LC/MS/MS	Human Urine	100 µL	10 - 5000 pg/mL
Tolbutamide, Hydroxy Tolbutamide and 4-Carboxy Tolbutamide	LC/MS/MS	Human Plasma	50 µL	100 - 50000 ng/mL for Tolbutamide, 2.5 - 1250 ng/mL for Hydroxy Tolbutamide, 5 - 2500 ng/mL for 4-Carboxy Tolbutamide
Triamcinolone	LC/MS/MS	Placebo	200 µL	5-250 and 250-5000 ng/mL
Triclosan	LC/MS/MS	Human Plasma, Urine	100 µL	10-300 ng/mL, 300-2000 ng/mL
Verapamil	LC/MS/MS	Human Plasma	100 µL	1 - 500 ng/mL

Compound (Metabolite)	Platform	Matrix	Sample Volume	Calibration Range
Virginiamycin	LC/MS/MS	Porcine liver, kidney, muscle and fat/skin	NA	25-1000 ppb
Zolpidem	LC/MS/MS	Human Plasma	1 mL	0.1~20 ng/mL
β -Estradiol 3- β -D-glucuronide	LC/MS/MS	Microsome	0.2 mL	1-500 nM
7 Analyte-Combo Assay (Ace+OH-Buf+OH-Dic+OH-Mep+OH-Mid+OH-Tes+OH-Bup)	LC/MS/MS	Microsome	0.2 mL	Ace+OH-Dic (50-10,000); OH-Buf (1-200); OH-Mid (10-2000); OH-Mep+OH-Bup (5-1000); OH-Tes (100-20,000)