



# Validated Method List



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### New Methods

Analyte	Matrix	LLOQ	Unit	Platform
Eotaxin	Human Plasma	5.86	pg/mL	ECL
Eotaxin-3	Human Plasma	4.85	pg/mL	ECL
Granulocyte Macrophage – Colony Stimulating Factor (GM-CSF)	Human Plasma	0.243	pg/mL	ECL
Interferon- $\gamma$ (IFN- $\gamma$ )	Human Plasma	1.33	pg/mL	ECL
Interleukin-1 $\alpha$ (IL-1 $\alpha$ )	Human Plasma	0.396	pg/mL	ECL
Interleukin-1 $\beta$ (IL-1 $\beta$ )	Human Plasma	0.46	pg/mL	ECL
Interleukin-2 (IL-2)	Human Plasma	0.315	pg/mL	ECL
Interleukin-4 (IL-4)	Human Plasma	0.064	pg/mL	ECL
Interleukin-5 (IL-5)	Human Plasma	3.56	pg/mL	ECL
Interleukin-6 (IL-6)	Human Plasma	0.626	pg/mL	ECL
Interleukin-7 (IL-7)	Human Plasma	0.205	pg/mL	ECL
Interleukin-8 (IL-8)	Human Plasma	0.488	pg/mL	ECL
Interleukin-8 (IL-8(HA))	Human Plasma	1185.9	pg/mL	ECL
Interleukin-10 (IL-10)	Human Plasma	0.309	pg/mL	ECL
Interleukin-12/IL-23p40 (IL-12/IL-23p40)	Human Plasma	0.786	pg/mL	ECL
Interleukin-12 (IL-12p70)	Human Plasma	0.401	pg/mL	ECL
Interleukin-13 (IL-13)	Human Plasma	2.45	pg/mL	ECL
Interleukin-15 (IL-15)	Human Plasma	0.19	pg/mL	ECL
Interleukin-16 (IL-16)	Human Plasma	2.47	pg/mL	ECL
Interleukin-17A (IL-17A)	Human Plasma	1.47	pg/mL	ECL
Interferon $\gamma$ – Inducible Protein-10 (IP-10)	Human Plasma	150	pg/mL	ECL
Monocyte Chemotactic Protein 1 (MCP-1)	Human Plasma	0.109	pg/mL	ECL
Monocyte Chemotactic Protein 4 (MCP-4)	Human Plasma	9.41	pg/mL	ECL
Macrophage-Derived Chemokine (MDC)	Human Plasma	10.4	pg/mL	ECL
Macrophage Inflammatory Protein (MIP-1 $\alpha$ )	Human Plasma	3.68	pg/mL	ECL
Macrophage Inflammatory Protein (MIP-1 $\beta$ )	Human Plasma	0.99	pg/mL	ECL
Thymus Activation-Regulated Chemokine (TARC)	Human Plasma	0.366	pg/mL	ECL
Tumor Necrosis Factor (TNF- $\alpha$ )	Human Plasma	0.31	pg/mL	ECL
Tumor Necrosis Factor (TNF- $\beta$ )	Human Plasma	0.154	pg/mL	ECL
Vascular Endothelial Growth Factor (VEGF)	Human Plasma	3.98	pg/mL	ECL

## Qualified Flow Cytometry Panels

### Preclinical

Panel Name	Analyte
Rat TBNK Panel	CD 3, CD45RA, CD161a, CD45

### Clinical

Panel Name	Analyte
Immune Monitoring Basic Panel	CD16, CD56, CD19, CD14, CD4, CD8, CD3, CD45
Immune Monitoring T Cell Subsets Panel	CD45RA, CCR7, CD28, PD1, CD27, CD4, CD8, CD3, CD57, CD45
Immune Monitoring T Cell Receptors (TCR)	TCR $\gamma\delta$ , TCR $\alpha\beta$ , HLA-DR, TCR $\delta 1$ , CD4, CD8, CD2, TCR V $\delta 2$ , CD 45
Immune Monitoring B Cell Panel	IgD, CD21, CD19, CD27, CD24, CD38, IgM, CD45
Immune Monitoring Dendritic Cell Panel	CD16, Lin (CD3/CD19/CD20/CD14/CD56), CD1c, CD11c, Clec9A, CD123, HLA-DR, CD45

30 markers

Absolute counts

4 Anti-coagulant : K(2)EDTA, NaHEPARIN, ACD, BCT

14 day stability

## Methods Under Development

Analyte	Matrix	LLOQ	Unit	Platform
Carboxyhemoglobin (COHb)	Human Whole Blood	1	%	Colorimetric
Chlorpromazine / 7-Hydroxychlorpromazine	Human Plasma	0.25 / 0.1	ng/mL	LC-MS/MS
Naloxone	Human Plasma	5	pg/mL	LC-MS/MS
Nicotine / Cotinine / Hydroxycotinine	Human Plasma	1 / 1 / 2	ng/mL	LC-MS/MS
Nicotine Equivalents – Urine (UNE)	Human Urine	10 / 10 / 10	ng/mL	LC-MS/MS
Tetrahydrocannabinol (THC), Delta-9- / 11-OH-Delta-9 / CBD	Human Plasma	0.5 / 0.25 / 0.25	ng/mL	LC-MS/MS
Total NNAL (Tobacco Specific Nitrosamine)	Human Urine	5	pg/mL	LC-MS/MS
Total NNN (Tobacco Specific Nitrosamine)	Human Urine	0.2	pg/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Acebutolol / Diacetolol	Human Plasma	5	ng/mL	HPLC/UV
Acetaminophen (APAP)	Human Plasma	0.1	mcg/mL	LC-MS/MS
Acetaminophen / Tramadol	Human Plasma	100 / 5	ng/mL	LC-MS/MS
Acetylsalicylic Acid / Salicylic Acid	Human Plasma	0.25/ 0.75	mcg/mL	HPLC/UV
Acid Glycoprotein, $\alpha_1$	Human Plasma	3.5	ng/mL	ELISA
Acyclovir	Human Plasma	20	ng/mL	HPLC/FL
Acyclovir	Human Urine	1	mcg/mL	HPLC/FL
Adipenectin	Human Serum	0.8	ng/mL	ELISA
Alkaline Hematin (see Menstrual Blood)	Feminine Hygiene Products			
Allopurinol / Oxypurinol	Human Plasma	50 / 100	ng/mL	LC-MS/MS
Alprazolam / $\alpha$ -Hydroxyalprazolam	Dog Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Alprazolam / $\alpha$ -Hydroxyalprazolam	Human Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Aluminum	Human Plasma	5 / 2	ng/mL	HPLC
Aluminum	Human Urine	5 / 2	ng/mL	HPLC
Amikacin	Human Serum	0.15	mcg/mL	LC-MS/MS
Amikacin	Human Urine	0.5	mcg/mL	LC-MS/MS
Aminosalicic Acid, 5-	Human Feces	1	ng on col	HPLC/FL
Aminosalicic Acid, 5-	Human Urine	2	mcg/mL	HPLC/FL
Aminosalicic Acid, 5-	Rat Plasma	10	ng/mL	LC-MS/MS
Aminosalicic Acid, 5- / N-Acetyl-5-Aminosalicic Acid	Human Plasma	10 / 10	ng/mL	HPLC/FL
Amiodarone / Desethylamiodarone	Human Plasma	10	ng/mL	LC-MS/MS
Amitriptyline	Human Plasma	200	pg/mL	LC-MS/MS
Amlodipine	Human Plasma	50	pg/mL	LC-MS/MS
Amlodipine	Human Plasma	0 / 15	ng/mL	LC-MS/MS
Amyloid Beta 38 ( $A\beta$ -38)	Human CSF	60	pg/mL	ECL
Amyloid Beta 40 ( $A\beta$ -40)	Human CSF	25	pg/mL	ECL
Amyloid Beta 42 ( $A\beta$ -42)	Human CSF	4	pg/mL	ECL
Anipamil	Human Plasma	5	ng/mL	HPLC/FL
Aprepitant	Human Plasma	10	ng/mL	LC-MS/MS
Aspirin (See Acetylsalicylic Acid)	Human Plasma	0.25	ng/mL	HPLC/UV
Atenolol	Human Plasma	10	ng/mL	LC-MS/MS
Atenolol	Human Urine	250	ng/mL	LC-MS/MS
Atenolol, (R)- and (S)-	Human Plasma	20 / 20	ng/mL	HPLC/FL
Atenolol, (R)- and (S)-	Rat Plasma	20 / 20	ng/mL	HPLC/FL
Atomoxetine	Human Plasma	10	ng/mL	LC-MS/MS
Atorvastatin / p- and o-Hydroxyatorvastatin	Human Plasma	0.2 / 0.2 / 0.2	ng/mL	LC-MS/MS
Azacytidine, 5-	Human Plasma	10	ng/mL	LC-MS/MS
Azithromycin	Human Plasma	2	ng/mL	LC-MS/MS
Benazepril/ Benazeprilat	Dog Plasma	0.1 / 0.5	ng/mL	LC-MS/MS
Benazepril / Benazeprilat	Human Plasma	2 / 2	ng/mL	LC-MS/MS
Bicalutamide	Human Plasma	2.5	ng/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Bucladesine	Human Plasma	1	ng/mL	LC-MS/MS
Brompheniramine / Chlorpheniramine / Pseudoephedrine	Human Plasma	0.5 / 0.5 / 5	ng/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Dog Plasma	100	pg/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Human Plasma	50	pg/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Rabbit Plasma	50	pg/mL	LC-MS/MS
Buspirone / 1-PP	Dog Plasma	100	pg/mL	LC-MS/MS
Buspirone / 1-PP	Human Plasma	100	pg/mL	LC-MS/MS
Butalbital	Human Plasma	0.1	mcg/mL	HPLC/UV
Butorphanol	Human Plasma	20	pg/mL	LC-MS/MS
Caffeine	Human Plasma	0.05	mcg/mL	HPLC/UV
Canrenone	Human Plasma	2	ng/mL	LC-MS/MS
Canrenone	Human Urine	20	ng/mL	LC-MS/MS
Captisol	Human Plasma	5	mcg/mL	LC-MS/MS
Carbamazepine	Human Plasma	0.05	mcg/mL	HPLC/UV
Carisbamate	Human Plasma	5	ng/mL	LC-MS/MS
Cetirizine	Human Plasma	2	ng/mL	LC-MS/MS
Chlorpheniramine	Human Plasma	0.5	ng/mL	LC-MS/MS
Chlorzoxazone	Human Plasma	20	ng/mL	LC-MS/MS
Cimetidine	Dog Plasma	50	ng/mL	HPLC/UV
Cimetidine	Human Plasma	50	ng/mL	HPLC/UV
Ciprofloxacin	Cat Plasma	25	ng/mL	HPLC/FL
Ciprofloxacin	Human Serum	10	ng/mL	LC-MS/MS
Ciprofloxacin	Human Plasma	10	ng/mL	LC-MS/MS
Cisapride	Human Plasma	5	ng/mL	HPLC/FL
Citric Acid	Human Urine	50	mcg/mL	LC-MS/MS
Clarithromycin	Human Plasma	10	ng/mL	LC-MS/MS
Clonazepam / 7-Hydroxyclozepam	Human Plasma	0.1 / 0.2	pg/mL	LC-MS/MS
Clonidine	Human Plasma	10	pg/mL	LC-MS/MS
Clotrimazole / Ketoconazole	Human Plasma	5 / 50	ng/mL	LC-MS/MS
Cluster of Differentiation 14 (CD-14)	Human Plasma	100	pg/mL	ELISA
Codeine	Human Plasma	1	ng/mL	LC-MS/MS
Cordycepin	Human Plasma	1	ng/mL	LC-MS/MS
Cortisol	Human Plasma	40.4	ng/mL	LC-MS/MS
Cortisone	Human Plasma	5	ng/mL	HPLC/UV
Cromolyn	Human Plasma	10	ng/mL	LC-MS/MS
Cromolyn	Human CSF	0.1	ng/mL	LC-MS/MS
Cyclobenzaprine	Dog Plasma	0.1	ng/mL	LC-MS/MS
Cyclobenzaprine	Human Plasma	0.2	ng/mL	LC-MS/MS
Cytarabine (Ara-C)	Human Plasma	20	ng/mL	LC-MS/MS
Deoxycholic Acid	Human Plasma	10	ng/mL	LC-MS/MS
Dexamethasone	Human Plasma	0.25	ng/mL	LC-MS/MS
Dextromethorphan	Human Plasma	50	pg/mL	LC-MS/MS

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Analyte	Matrix	LLOQ	Unit	Platform
Dextromethorphan / 3-Hydroxymorphinan / 4-Methoxymorphinan	Human Plasma	10	ng/mL	HPLC/FL
Dextromethorphan / 3-Hydroxymorphinan / 4-Methoxymorphinan	Human Urine	0.25	mcg/mL	HPLC/FL
Dextrorphan	Human Plasma	10	ng/mL	HPLC/FL
Dextrorphan	Human Urine	250	ng/mL	HPLC/FL
Diclofenac	Human Plasma	5	ng/mL	LC-MS/MS
Diclofenac	Rat Plasma	10	ng/mL	HPLC/UV
Digoxin	Human Plasma	0.1	ng/mL	LC-MS/MS
Diltiazem / N-Desmethyldiltiazem / Desacetyldiltiazem	Human Plasma	4 / 2 / 1	ng/mL	LC-MS/MS
Diphenhydramine	Human Plasma	1	ng/mL	LC-MS/MS
Dipyridamole	Human Plasma	50	ng/mL	LC-MS/MS
DNA Quantitation	Human Tissue	50	ng/mL	Fluorometric
Doxepin / Nordoxepin	Human Urine	0.25 / 0.20	ng/mL	LC-MS/MS
Doxorubicin	Human Urine	1.5	ng/mL	LC-MS/MS
Doxorubicin/Doxorubicinol	Human Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Doxylamine	Human Plasma	5 / 100	ng/mL	HPLC/UV
Doxylamine	Human Urine	5 / 100	ng/mL	HPLC/UV
Dyclonine	Dog Serum	1	ng/mL	LC-MS/MS
Ebastine	Human Plasma	10	ng/mL	HPLC/UV
Efavirenz	Human Plasma	50	ng/mL	LC-MS/MS
Enalapril / Enalaprilat	Human Plasma	0.25	ng/mL	LC-MS/MS
Eotaxin	Human Plasma	5.86	pg/mL	ECL
Eotaxin-3	Human Plasma	4.85	pg/mL	ECL
Esomeprazole	Human Plasma	0.25	ng/mL	LC-MS/MS
Ethambutol	Human DBS	100	ng/mL	LC-MS/MS
Famotidine	Human Plasma	2	ng/mL	LC-MS/MS
Famotidine	Human Urine	2	ng/mL	LC-MS/MS
Felodipine	Human Plasma	25	pg/mL	LC-MS/MS
Femoxitine / N-Desmethylfemoxitine	Human Plasma	5	ng/mL	HPLC/FL
Femoxitine / N-Desmethylfemoxitine	Monkey Plasma	5	ng/mL	HPLC/FL
Fenofibric Acid	Human Plasma	20	ng/mL	LC-MS/MS
Fexofenadine	Human Plasma	1	ng/mL	LC-MS/MS
Fexofenadine	Mouse Plasma	25	ng/mL	LC-MS/MS
Fexofenadine	Rabbit Plasma	25	ng/mL	LC-MS/MS
Fexofenadine	Rat Plasma	25	ng/mL	LC-MS/MS
Flavoxate / MFCA metabolite	Human Plasma	0.1	ng/mL	LC-MS/MS
Flurbiprofen	Human Plasma	5	ng/mL	LC-MS/MS
Flurbiprofen, (R)- and (S)-	Human Plasma	0.25	mcg/mL	HPLC/FL
Flurbiprofen, (R)- and (S)-	Human Urine	0.5	mcg/mL	HPLC/FL
Furosemide	Human Plasma	50	ng/mL	LC-MS/MS
Furosemide	Human Urine	50	ng/mL	LC-MS/MS



Analyte	Matrix	LLOQ	Unit	Platform
Gemcitabine	Human Plasma	40	ng/mL	HPLC/UV
Gemcitabine	Human Urine	40	ng/mL	HPLC/UV
Gemfibrozil	Human Plasma	0.5	mcg/mL	HPLC/UV
Ghrelin Active	Human Plasma	100	pg/mL	ELISA
Ghrelin Total	Human Plasma	200	pg/mL	ELISA
Gliclazide	Human Plasma	100	ng/mL	HPLC/UV
Granisetron	Dog Plasma	0.1	ng/mL	LC-MS/MS
Granulocyte Macrophage- Colony Stimulating Factor (GM-CSF)	Human Plasma	0.243	pg/mL	ECL
Guaifenesin / Naproxen	Human Plasma	10 / 250	ng/mL	LC-MS/MS
Haloperidol	Human Plasma	25	pg/mL	LC-MS/MS
Hepatocyte Growth Factor (HGF)	Human Plasma	400	pg/mL	ELISA
Heptazyme Antibodies	Monkey Serum	1:25,600	titer	ELISA
Homocysteine	Dog Plasma	5	mcg/mL	LC-MS/MS
Homocysteine	Rat Plasma	5	mcg/mL	LC-MS/MS
Hydrochlorothiazide (HCTZ)	Human Plasma	1	ng/mL	HPLC/UV
Hydrochlorothiazide (HCTZ)	Human Urine	0.05	mcg/mL	HPLC/UV
Hydrocodone	Human Plasma	0.1	ng/mL	LC-MS/MS
Hydromorphone	Dog Plasma	20	pg/mL	LC-MS/MS
Hydromorphone	Human Plasma	40	pg/mL	LC-MS/MS
Hydroxymephenytoin, (R)-4- / Hydroxymephenytoin, (S)-4-	Human Plasma	10	ng/mL	LC-MS/MS
Hydroxymephenytoin, (R)-4- / Hydroxymephenytoin, (S)-4-	Human Saliva	10	ng/mL	LC-MS/MS
Hydroxymephenytoin, (R)-4- / Hydroxymephenytoin, (S)-4-	Human Urine	0.1	mcg/mL	LC-MS/MS
Hydroxymidazolam, $\alpha$ - / Hydroxymidazolam, 4-	Dog Plasma	2 / 2	ng/mL	LC-MS/MS
Hydroxymidazolam, $\alpha$ - / Hydroxymidazolam, 4-	Rat Plasma	2 / 2	ng/mL	LC-MS/MS
Ibuprofen	Human Plasma	0.25	mcg/mL	LC-MS/MS
Ibuprofen	Human CSF	0.3	ng/mL	LC-MS/MS
Ibuprofen	Human Plasma	25	ng/mL	LC-MS/MS
Ibuprofen, (R)- and (S)-	Human Plasma	0.25	mcg/mL	HPLC/UV
Ibuprofen, (R)- and (S)-	Human Urine	2.5	mcg/mL	HPLC/FL
Imipramine / Desipramine	Human Plasma	0.1	ng/mL	LC-MS/MS
Indocyanine Green (ICG)	Human Plasma	0.3	mcg/mL	HPLC/UV
Indomethacin	Human Plasma	10	ng/mL	LC-MS/MS
Indomethacin	Plasma/Serum	20	ng/mL	HPLC/FL
Interferon alpha	Human Serum	10	pg/mL	ELISA
Interferon $\beta$ 1 (IFN- $\beta$ 1)	Human Plasma	2	pg/mL	ELISA
Interferon- $\gamma$ (IFN- $\gamma$ )	Human Plasma	1.33	pg/mL	ECL
Interferon- $\gamma$ (IFN- $\gamma$ )	Human Plasma	15	pg/mL	ELISA

Analyte	Matrix	LLOQ	Unit	Platform
Interleukin-1 $\alpha$ (IL-1 $\alpha$ )	Human Plasma	0.396	pg/mL	ECL
Interleukin-1 $\beta$ (IL-1 $\beta$ )	Human Plasma	0.46	pg/mL	ECL
Interleukin-2 (IL-2)	Human Plasma	0.315	pg/mL	ECL
Interleukin-4 (IL-4)	Human Plasma	0.064	pg/mL	ECL
Interleukin-5 (IL-5)	Human Plasma	3.56	pg/mL	ECL
Interleukin-6 (IL-6)	Human Plasma	0.626	pg/mL	ECL
Interleukin-7 (IL-7)	Human Plasma	0.205	pg/mL	ECL
Interleukin-8 (IL-8)	Human Plasma	0.488	pg/mL	ECL
Interleukin-8 (IL-8(HA))	Human Plasma	1185.9	pg/mL	ECL
Interleukin-10 (IL-10)	Human Plasma	0.309	pg/mL	ECL
Interleukin-10 (IL-10)	Human Plasma	0.5	pg/mL	ECL
Interleukin-10 (IL-10)	Rat Plasma	20	pg/mL	ECL
Interleukin-10 (IL-10)	Rat Tissue	20	pg/mL	ECL
Interleukin-12 (IL-12/IL-23p40)	Human Plasma	0.786	pg/mL	ECL
Interleukin-12 (IL-12p70)	Human Plasma	0.401	pg/mL	ECL
Interleukin-13 (IL-13)	Human Plasm	2.45	pg/mL	ECL
Interleukin-15 (IL-15)	Human Plasma	0.19	pg/mL	ECL
Interleukin-16 (IL-16)	Human Plasma	2.47	pg/mL	ECL
Interleukin-17A (IL-17A)	Human Plasm	1.47	pg/mL	ECL
Interferon- $\gamma$ – Inducible Protein-10(IP-10)	Human Plasma	150	pg/mL	ECL
Isotretinoin / 4-Oxo-Isotretinoin	Human Plasma	10	ng/mL	LC-MS/MS
Isradapine	Human Plasma	0.1	ng/mL	LC-MS/MS
Ketoconazole / Clotrimazole	Human Plasma	50 / 5	ng/mL	LC-MS/MS
Ketoprofen	Human Plasma	0.25	ng/mL	LC-MS/MS
Lansoprazole	Human Plasma	0.25	ng/mL	LC-MS/MS
Levofloxacin	Rabbit Plasma	10	ng/mL	LC-MS/MS
Lorazepam	Human Plasma	0.2	ng/mL	LC-MS/MS
Losartan / Carboxylosartan	Human Plasma	2 / 2	ng/mL	LC-MS/MS
Meloxicam	Human Plasma	10	ng/mL	LC-MS/MS
Melphalan	Human Plasma	25	ng/mL	LC-MS/MS
Memantine	Human Plasma	0.5	ng/mL	LC-MS/MS
Memantine N-Glucuronide	Human Plasma	0.2	ng/mL	LC-MS/MS
Menstrual Blood (as Alkaline Hematin)	Menstrual Products	1	mL	Colorimetric
Mephénytoin, (R)- / Mephénytoin, (S)-	Human Plasma	10	ng/mL	LC-MS/MS
Mephénytoin, (R)- / Mephénytoin, (S)-	Human Saliva	10	ng/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Mephenytoin, (R)- / Mephenytoin, (S)-	Human Urine	0.1	mcg/mL	LC-MS/MS
Mercaptopurine, 6- / 6-Thiouric Acid	Human Plasma	2 / 20	ng/mL	LC-MS/MS
Mercaptopurine, 6- / 6-Thiouric Acid	Human Urine	6 / 60	ng/mL	LC-MS/MS
Metformin	Human Plasma	20	ng/mL	LC-MS/MS
Methocarbamol	Human Plasma	0.1	mcg/mL	HPLC/FL
Methylnicotinamide	Human Plasma	10	ng/mL	LC-MS/MS
Methylphenidate	Human Plasma	0.1	ng/mL	LC-MS/MS
Metoclopramide	Human Plasma	1	ng/mL	HPLC/UV
Metoclopramide	Human Urine	60	ng/mL	HPLC/FL
Metoprolol	Human Plasma	1	ng/mL	LC-MS/MS
Metoprolol / Hydroxymetoprolol	Human Plasma	2.5	ng/mL	HPLC/FL
Metoprolol / Hydroxymetoprolol	Human Urine	1000	ng/mL	HPLC/FL
Midazolam / $\alpha$ -Hydroxymidazolam	Human Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Midazolam / 1-Hydroxymidazolam / 4-Hydroxymidazolam	Human Urine	10 / 2 / 2	ng/mL	LC-MS/MS
Midazolam / $\alpha$ -Hydroxymidazolam	Human Urine	20 / 0.5	ng/mL	LC-MS/MS
Molindone	Human Plasma	0.25	ng/mL	LC-MS/MS
Monocyte Chemotactic Protein 1 (MCP-1)	Human Plasma	0.109	pg/mL	ECL
Monocyte Chemotactic Protein 1 (MCP-1)	Human Plasma	30	pg/mL	ELISA
Monocyte Chemotactic Protein 3 (MCP-3)	Human Plasma	15	pg/mL	ELISA
Monocyte Chemotactic Protein 4 (MCP-4)	Human Plasma	9.41	pg/mL	ECL
Macrophage-Derived Chemokine (MDC)	Human Plasma	10.4	pg/mL	ECL
Macrophage Inflammatory Protein (MIP-1 $\alpha$ )	Human Plasma	3.68	pg/mL	ECL
Macrophage Inflammatory Protein (MIP-1 $\beta$ )	Human Plasma	0.99	pg/mL	ECL
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Dog Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Human Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Ovine Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Moxifloxacin	Human DBS	100	ng/mL	LC-MS/MS
Moxifloxacin	Human Plasma	20	ng/mL	LC-MS/MS
Naproxen	Human Plasma	0.25	mcg/mL	LC-MS/MS
Niacin (Nicotinic Acid) / Nicotinuric Acid	Human Urine	25	ng/mL	LC-MS/MS
Nifedipine / NPO	Human Plasma	1	ng/mL	LC-MS/MS
Nitrofurantoin	Human Plasma	5	ng/mL	HPLC/UV
Nitrofurantoin	Human Urine	2	mcg/mL	HPLC/UV
Noroxycodone	Human Plasma	0.25	ng/mL	LC-MS/MS
Olanzapine	Human Plasma	0.1	ng/mL	LC-MS/MS
Omeprazole	Human Plasma	5	ng/mL	LC-MS/MS
Ondansetron	Human Plasma	0.5	ng/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Oxandrolone	Human Plasma	0.25	ng/mL	LC-MS/MS
Oxaprozin	Human Plasma	2	mcg/mL	HPLC/UV
Oxybutynin / N-Desethyloxybutynin	Human Plasma	50 / 250	pg/mL	LC-MS/MS
Oxycodone / Noroxycodone / Oxymorphone	Human Plasma	0.25	ng/mL	LC-MS/MS
Oxymorphone	Human Plasma	0.25	ng/mL	LC-MS/MS
Paclitaxel	Human Plasma	100	pg/mL	LC-MS/MS
Paclitaxel	Human Urine	5	ng/mL	LC-MS/MS
Pantoprazole	Human Plasma	10	ng/mL	LC-MS/MS
Paraxanthine	Human Plasma	25	ng/mL	HPLC/UV
Paroxetine	Human Plasma	0.2	ng/mL	LC-MS/MS
Pentazocine	Human Plasma	1	ng/mL	LC-MS/MS
Phenylephrine	Human Plasma	0.5	ng/mL	LC-MS/MS
Phenylephrine	Human Urine	5	ng/mL	LC-MS/MS
Phenytoin	Human Plasma	0.25	mcg/mL	HPLC/UV
Phenytoin	Human Urine	1	mcg/mL	HPLC/UV
Phenytoin / Phenylhydantoin / Phenobarbital (Free Assay)	Human Urine	0.1	mcg/mL	HPLC/UV
Pindolol	Human Plasma	1	ng/mL	HPLC/UV
Piroxicam	Human Plasma	50	ng/mL	HPLC/UV
Potassium	Human Urine	8	mM	ICP-MS
Prednisolone	Human Plasma	1	ng/mL	HPLC/UV
Prednisone	Human Plasma	1	ng/mL	HPLC/UV
Primidone	Human Plasma	25	ng/mL	LC-MS/MS
Propafenone / N-Despropylpropafenone- / 5-Hydroxypropafenone	Human Plasma	250	pg/mL	LC-MS/MS
Propofol	Human Plasma	2.5	ng/mL	HPLC/FL
Propoxyphene/Norpropoxyphene	Human Plasma	1	ng/mL	LC-MS/MS
Propranolol / 4-Hydroxypropranolol	Human Plasma	2.5	ng/mL	HPLC/FL
Propranolol Glucuronide	Human Urine	1	mcg/mL	HPLC/FL
Pseudoephedrine	Human Plasma	5	ng/mL	LC-MS/MS
Pyrazinamide	Human DBS	10	mcg/mL	LC-MS/MS
Quinidine	Human Plasma	10	ng/mL	HPLC/UV
Ranitidine	Human Plasma	5	ng/mL	HPLC/UV
Reserpine	Human Plasma	25	pg/mL	HPLC/FL
Resistin	Human Plasma	160	ng/mL	ELISA
Ribavirin	Human Plasma	5	ng/mL	LC-MS/MS
Rifampin	Human DBS	200	ng/mL	LC-MS/MS
Risperidone	Human Plasma	0.1	ng/mL	LC-MS/MS
Ropinirole	Human Plasma	20	pg/mL	LC-MS/MS
Ropinirole	Mini-Pig Plasma	20	pg/mL	LC-MS/MS
Rosuvastatin	Human Plasma	0.2	ng/mL	LC-MS/MS
Salicylic Acid	Plasma	0.7	mcg/mL	HPLC/FL
Salicylic Acid	Urine	9.2	mcg/mL	HPLC/FL

Analyte	Matrix	LLOQ	Unit	Platform
Salicylic Acid	Human Plasma	25	ng/mL	HPLC/UV
Salicylic Acid	Human Urine	2.5	mcg/mL	HPLC/UV
Simvastatin / Simvastatin Hydroxy Acid	Human Plasma	50 / 50	pg/mL	LC-MS/MS
Spironolactone	Human Plasma	0.5	ng/mL	LC-MS/MS
Sumatriptan	Human Plasma	0.5	ng/mL	LC-MS/MS
Tacrolimus	Rat DBS	5	ng/mL	LC-MS/MS
Tacrolimus	Dog Whole Blood	0.1	ng/mL	LC-MS/MS
Tacrolimus	Human Whole Blood	0.5	ng/mL	LC-MS/MS
Thymus Activation-Regulated Chemokine (TARC)	Human Plasma	0.366	pg/mL	ECL
Temazepam	Human Plasma	20	ng/mL	LC-MS/MS
Tenofovir	Human Plasma	10	ng/mL	LC-MS/MS
Tenoxicam	Human Plasma	20	ng/mL	HPLC/UV
Terbinafine	Human Nail	200	mcg/g	LC-MS/MS
Terbinafine / N-Desmethylterbinafine	Human Plasma	40	pg/mL	LC-MS/MS
Testosterone (total)	Human Serum	5	ng/dL	RIA
Theophylline	Human Plasma	50	ng/mL	HPLC/UV
Theophylline	Human Plasma	0.2	mcg/mL	HPLC/UV
Theophylline	Human Serum	0.2	mcg/mL	HPLC/UV
Tizanidine	Human Plasma	100	pg/mL	LC-MS/MS
Tumor Necrosis Factor (TNF- $\alpha$ )	Human Plasma	0.31	pg/mL	ECL
Tumor Necrosis Factor (TNF- $\beta$ )	Human Plasma	0.154	pg/mL	ECL
Tolbutamide / Carboxytolbutamide / Hydroxytolbutamide	Human Plasma	0.25 / 0.5 / 0.5	mcg/mL	HPLC/UV
Tolbutamide / Carboxytolbutamide / Hydroxytolbutamide	Human Urine	0.25 / 0.5 / 0.5	mcg/mL	HPLC/UV
Total Tau	Human CSF	30	pg/mL	ECL
Tramadol	Dog Plasma	2	ng/mL	LC-MS/MS
Tramadol / Acetaminophen	Human Plasma	2.5 / 100	ng/mL	LC-MS/MS
Tretinoin / Isotretinoin	Human Plasma	10 / 10	ng/mL	LC-MS/MS
Triamcinolone	Human Plasma	20	pg/mL	LC-MS/MS
Triamterene	Human Plasma	2	ng/mL	LC-MS/MS
Tyramine	Human Plasma	1	ng/mL	LC-MS/MS
Vascular Endothelial Growth Factor (VEGF)	Human Plasma	3.98	pg/mL	ECL
Valproic Acid	Human Plasma	0.5	mcg/mL	LC-MS/MS
Venlafaxine / O-Desmethylvenlafaxine	Human Plasma	2.5	ng/mL	LC-MS/MS
Vitamin B6	Human Plasma	50	ng/mL	LC-MS/MS
Vitamin E	Human Plasma	0.5	mcg/mL	HPLC/UV
Warfarin, (R)- and (S)-	Human Plasma	50	ng/mL	HPLC/FL
Xanthine	Human Urine	1	mcg/mL	HPLC/UV
Xanthine	Human Plasma	0.5	mcg/mL	HPLC/UV
Zolpidem	Human Plasma	0.5	ng/mL	LC-MS/MS
Zolmitriptan / N-Desmethylzolmitriptan	Human Plasma	0.1 / 0.1	ng/mL	LC-MS/MS
Zonisamide	Human Serum	50	ng/mL	HPLC/UV

Analyte	Matrix	LLOQ	Unit	Platform
Acetaminophen (APAP)	Human Plasma	0.1	mcg/mL	LC-MS/MS
Acetaminophen / Tramadol	Human Plasma	100 / 5	ng/mL	LC-MS/MS
Acetylsalicylic Acid / Salicylic Acid	Human Plasma	0.25 / 0.75	mcg/mL	HPLC/UV
Buprenorphine / Norbuprenorphine	Dog Plasma	100	pg/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Human Plasma	50	pg/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Rabbit Plasma	50	pg/mL	LC-MS/MS
Butorphanol	Human Plasma	20	pg/mL	LC-MS/MS
Codeine	Human Plasma	1	ng/mL	LC-MS/MS
Diclofenac	Human Plasma	5	ng/mL	LC-MS/MS
Flurbiprofen	Human Plasma	5	ng/mL	LC-MS/MS
Flurbiprofen, (R)- and (S)-	Human Plasma	0.25	mcg/mL	HPLC/FL
Flurbiprofen, (R)- and (S)-	Human Urine	0.5	mcg/mL	HPLC/FL
Hydrocodone	Human Plasma	0.1	ng/mL	LC-MS/MS
Hydromorphone	Dog Plasma	20	pg/mL	LC-MS/MS
Hydromorphone	Human Plasma	20	pg/mL	LC-MS/MS
Ibuprofen	Human Plasma	0.25	mcg/mL	LC-MS/MS
Ibuprofen	Human Plasma	25	ng/mL	LC-MS/MS
Ibuprofen	Human CSF	0.3	ng/mL	LC-MS/MS
Ibuprofen, (R)- and (S)-	Human Plasma	0.25	mcg/mL	HPLC/UV
Ibuprofen, (R)- and (S)-	Human Urine	2.5	mcg/mL	HPLC/FL
Indomethacin	Human Plasma	10	ng/mL	LC-MS/MS
Ketoprofen	Human Urine	1000	ng/mL	HPLC
Ketoprofen	Human Plasma	0.25	ng/mL	LC-MS/MS
Mefenamic Acid	Human Plasma	40	ng/mL	LC-MS/MS
Meloxicam	Human Plasma	10	ng/mL	LC-MS/MS
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Dog Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Human Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Ovine Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Naproxen	Human Plasma	0.25	mcg/mL	LC-MS/MS
Oxaprozin	Human Plasma	2	mcg/mL	HPLC/UV
Noroxycodone	Human Plasma	0.25	ng/mL	LC-MS/MS
Oxycodone / Noroxycodone / Oxymorphone	Human Plasma	0.25	ng/mL	LC-MS/MS
Oxymorphone	Human Plasma	0.25	ng/mL	LC-MS/MS
Pentazocine	Human Plasma	1	ng/mL	LC-MS/MS
Piroxicam	Human Plasma	50	ng/mL	HPLC/UV
Propoxyphene / Norpropoxyphene	Human Plasma	1	ng/mL	LC-MS/MS
Salicylic Acid	Plasma	0.7	mcg/mL	HPLC/FL
Salicylic Acid	Urine	9.2	mcg/mL	HPLC/FL
Salicyluric Acid	Human Plasma	25	ng/mL	HPLC/UV
Salicyluric Acid	Human Urine	2.5	mcg/mL	HPLC/UV

Analyte	Matrix	LLOQ	Unit	Platform
Tenoxicam	Human Plasma	20	ng/mL	HPLC/UV
Tramadol	Dog Plasma	2	ng/mL	LC-MS/MS
Tramadol / Acetaminophen	Human Plasma	2.5 / 100	ng/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Alprazolam / $\alpha$ -Hydroxyalprazolam	Dog Plasma	0.5	ng/mL	LC-MS/MS
Aminosalicic Acid, 5-	Rat Plasma	10	ng/mL	LC-MS/MS
Atenolol, (R)- and (S)-	Rat Plasma	20 / 20	ng/mL	HPLC/FL
Benazepril/ Benazeprilat	Dog Plasma	0.1 / 0.5	ng/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Dog Plasma	100	pg/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Rabbit Plasma	50	pg/mL	LC-MS/MS
Buspirone / 1-PP	Dog Plasma	100	pg/mL	LC-MS/MS
Cimetidine	Dog Plasma	50	ng/mL	HPLC/UV
Ciprofloxacin	Cat Plasma	25	ng/mL	HPLC/FL
Cyclobenzaprine	Dog Plasma	0.1	ng/mL	LC-MS/MS
Diclofenac	Rat Plasma	10	ng/mL	HPLC/UV
Dyclonine	Dog Serum	1	ng/mL	LC-MS/MS
Femoxitine / N-Desmethylofemoxitine	Monkey Plasma	5	ng/mL	HPLC/FL
Fexofenadine	Mouse Plasma	25	ng/mL	LC-MS/MS
Fexofenadine	Rabbit Plasma	25	ng/mL	LC-MS/MS
Fexofenadine	Rat Plasma	25	ng/mL	LC-MS/MS
Granisetron	Dog Plasma	0.1	ng/mL	LC-MS/MS
Homocysteine	Dog Plasma	5	mcg/mL	LC-MS/MS
Homocysteine	Rat Plasma	5	mcg/mL	LC-MS/MS
Hydromorphone	Dog Plasma	20	pg/mL	LC-MS/MS
Hydromorphone	Dog Serum	20	pg/mL	LC-MS/MS
Hydroxymidazolam, $\alpha$ - / Hydroxymidazolam, 4-	Dog Plasma	2 / 2	ng/mL	LC-MS/MS
Hydroxymidazolam, $\alpha$ - / Hydroxymidazolam, 4-	Rat Plasma	2 / 2	ng/mL	LC-MS/MS
Levofloxacin	Rabbit Plasma	10	ng/mL	LC-MS/MS
Lidocaine	Dog Plasma	0.1	ng/mL	LC-MS/MS
Lidocaine	Dog Urine	0.1	ng/mL	LC-MS/MS
Lidocaine	Dog Tissues	10	ng/g	LC-MS/MS
Lidocaine	Rat Plasma	0.5	ng/mL	LC-MS/MS
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Dog Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Morphine / Morphine-3-Glucuronide / Morphine-6-Glucuronide	Ovine Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Ropinirole	Mini-Pig Plasma	20	pg/mL	LC-MS/MS
Tacrolimus	Dog Whole Blood	0.1	ng/mL	LC-MS/MS
Tramadol	Dog Plasma	2	ng/mL	LC-MS/MS



Analyte	Matrix	LLOQ	Unit	Platform
Acid Glycoprotein, $\alpha_1$	Human Plasma	3.5	ng/mL	ELISA
Adiponectin	Human Serum	0.8	ng/mL	ELISA
Amyloid Beta 38 (A $\beta$ -38)	Human CSF	60	pg/mL	ECL
Amyloid Beta 40 (A $\beta$ -40)	Human CSF	25	pg/mL	ECL
Amyloid Beta 42 (A $\beta$ -42)	Human CSF	4	pg/mL	ECL
Cluster of Differentiation 14 (CD-14)	Human Plasma	100	pg/mL	ELISA
Cortisol	Human Plasma	40.4	ng/mL	LC-MS/MS
Cortisone	Human Plasma	5	ng/mL	HPLC/UV
Deoxycholic Acid	Human Plasma	10	ng/mL	LC-MS/MS
Eotaxin	Human Plasma	5.86	pg/mL	ECL
Eotaxin-3	Human Plasma	4.85	pg/mL	ECL
Ghrelin	Human Serum	94	pg/mL	ELISA
Ghrelin Active	Human Plasma	100	pg/mL	ELISA
Ghrelin Total	Human Plasma	200	pg/mL	ELISA
Granulocyte Macrophage – Colony Stimulating Factor (GM-CSF)	Human Plasma	0.243	pg/mL	ECL
Interferon $\beta$ 1 (IFN- $\beta$ 1)	Human Plasma	2	pg/mL	ELISA
Interferon- $\gamma$ (IFN- $\gamma$ )	Human Plasma	1.33	pg/mL	ECL
Interferon- $\gamma$ (IFN- $\gamma$ )	Human Plasma	15	pg/mL	ELISA
Interleukin-1 $\alpha$ (IL-1 $\alpha$ )	Human Plasma	0.396	pg/mL	ECL
Interleukin-1 $\beta$ (IL-1 $\beta$ )	Human Plasma	0.46	pg/mL	ECL
Interleukin-2 (IL-2)	Human Plasma	0.315	pg/mL	ECL
Interleukin-4 (IL-4)	Human Plasma	0.064	pg/mL	ECL
Interleukin-5 (IL-5)	Human Plasma	3.56	pg/mL	ECL
Interleukin-6 (IL-6)	Human Plasma	0.626	pg/mL	ECL
Interleukin-7 (IL-7)	Human Plasma	0.205	pg/mL	ECL
Interleukin-8 (IL-8)	Human Plasma	0.488	pg/mL	ECL
Interleukin-8 (IL-8(HA))	Human Plasma	1185.9	pg/mL	ECL
Interleukin-10 (IL-10)	Human Plasma	0.309	0.309	ECL
Interleukin-10 (IL-10)	Human Plasma	0.5	pg/mL	ECL
Interleukin-10 (IL-10)	Rat Plasma	20	pg/mL	ECL
Interleukin-10 (IL-10)	Rat Tissue	20	pg/mL	ECL
Interleukin-12/IL-23p40 (IL-12/IL-23p40)	Human Plasma	0.786	pg/mL	ECL
Interleukin-12 (IL-12p70)	Human Plasma	0.401	pg/mL	ECL
Interleukin-13 (IL-13)	Human Plasma	2.45	pg/mL	ECL
Interleukin-15 (IL-15)	Human Plasma	0.19	pg/mL	ECL
Interleukin-16 (IL-16)	Human Plasma	2.47	pg/mL	ECL
Interleukin-17A (IL-17A)	Human Plasma	1.47	pg/mL	ECL
Interferon $\gamma$ – Inducible Protein-10 (IP-10)	Human Plasma	150	pg/mL	ECL
Hepatocyte Growth Factor (HGF)	Human Plasma	400	pg/mL	ELISA
Homocysteine	Dog Plasma	5	mcg/mL	LC-MS/MS
Homocysteine	Rat Plasma	5	mcg/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Monocyte Chemotactic Protein 1 (MCP-1)	Human Plasma	0.109	pg/mL	ECL
Monocyte Chemotactic Protein 1 (MCP-1)	Human Plasma	30	pg/mL	ELISA
Monocyte Chemotactic Protein 3 (MCP-3)	Human Plasma	15	pg/mL	ELISA
Monocyte Chemotactic Protein 4 (MCP-4)	Human Plasma	9.41	pg/mL	ECL
Macrophage-Derived Chemokine (MDC)	Human Plasma	10.4	pg/mL	ECL
Methylnicotinamide	Human Plasma	10	ng/mL	LC-MS/MS
Macrophage Inflammatory Protein (MIP-1 $\alpha$ )	Human Plasma	3.68	pg/mL	ECL
Macrophage Inflammatory Protein (MIP-1 $\beta$ )	Human Plasma	0.99	pg/mL	ECL
Resistin	Human Plasma	160	ng/mL	ELISA
Thymus Activation-Regulated Chemokine (TARC)	Human Plasma	0.366	pg/mL	ECL
Total Tau	Human CSF	30	pg/mL	ECL
Tumor Necrosis Factor (TNF- $\alpha$ )	Human Plasma	0.31	pg/mL	ECL
Tumor Necrosis Factor (TNF- $\beta$ )	Human Plasma	0.154	pg/mL	ECL
Tyramine	Human Plasma	1	ng/mL	LC-MS/MS
Vascular Endothelial Growth Factor (VEGF)	Human Plasma	3.98	pg/mL	ECL
Vitamin B6	Human Plasma	50	ng/mL	LC-MS/MS
Vitamin E	Human Plasma	0.5	mcg/mL	HPLC/UV
Xanthine	Human Plasma	0.5	mcg/mL	HPLC/UV
Xanthine	Human Urine	1	mcg/mL	HPLC/UV

Analyte	Matrix	LLOQ	Unit	Platform
Acebutolol / Diacetolol	Human Plasma	5	ng/mL	HPLC/UV
Amiodarone / Desethylamiodarone	Human Plasma	10	ng/mL	LC-MS/MS
Amlodipine	Human Plasma	50	pg/mL	LC-MS/MS
Anipamil	Human Plasma	5	ng/mL	HPLC/FL
Atenolol	Human Plasma	10	ng/mL	LC-MS/MS
Atenolol	Human Urine	250	ng/mL	LC-MS/MS
Atenolol, (R)- and (S)-	Human Plasma	20	ng/mL	HPLC/FL
Atenolol, (R)- and (S)-	Rat Plasma	20	ng/mL	HPLC/FL
Benazepril / Benazeprilat	Dog Plasma	0.1 / 0.5	ng/mL	LC-MS/MS
Benazepril / Benazeprilat	Human Plasma	2 / 2	ng/mL	LC-MS/MS
Bucladesine	Human Plasma	1	ng/mL	LC-MS/MS
Digoxin	Human Plasma	0.1	ng/mL	LC-MS/MS
Diltiazem / N-Desmethyldiltiazem / Desacetyldiltiazem	Human Plasma	4 / 2 / 1	ng/mL	LC-MS/MS
Dipyridamole	Human Plasma	50	ng/mL	LC-MS/MS
Enalapril & Enalaprilat	Human Plasma	0.25	ng/mL	LC-MS/MS
Felodipine	Human Plasma	25	pg/mL	LC-MS/MS
Isradapine	Human Plasma	0.1	ng/mL	LC-MS/MS
Metoprolol	Human Plasma	1	ng/mL	LC-MS/MS
Metoprolol / Hydroxymetoprolol	Human Plasma	2.5	ng/mL	HPLC/FL
Metoprolol / Hydroxymetoprolol	Human Urine	1000	ng/mL	HPLC/FL
Nifedipine / NPO	Human Plasma	1	ng/mL	LC-MS/MS
Pindolol	Human Plasma	1	ng/mL	HPLC/UV
Propafenone / N-Despropylpropafenone- / 5- Hydroxypropafenone	Human Plasma	250	pg/mL	LC-MS/MS
Propranolol / 4-Hydroxypropranolol	Human Plasma	2.5	ng/mL	HPLC/FL
Propranolol Glucuronide	Human Urine	1	mcg/mL	HPLC/FL
Quinidine	Human Plasma	10	ng/mL	HPLC/UV
Reserpine	Human Plasma	25	pg/mL	HPLC/FL
Verapamil / Norverapamil	Plasma	2.5	ng/mL	HPLC/FL

Analyte	Matrix	LLOQ	Unit	Platform
Alprazolam	Human Plasma	0.5	ng/mL	LC-MS/MS
Alprazolam / $\alpha$ -Hydroxyalprazolam	Dog Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Alprazolam / $\alpha$ -Hydroxyalprazolam	Human Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Amitriptyline	Human Plasma	200	pg/mL	LC-MS/MS
Aprepitant	Human Plasma	10	ng/mL	LC-MS/MS
Atomoxetine	Human Plasma	10	ng/mL	LC-MS/MS
Buspirone / 1-PP	Dog Plasma	100	pg/mL	LC-MS/MS
Buspirone / 1-PP	Human Plasma	100	pg/mL	LC-MS/MS
Butalbital	Human Plasma	0.1	mcg/mL	HPLC/UV
Caffeine	Human Plasma	0.05	mcg/mL	HPLC/UV
Carbamazepine	Human Plasma	0.05	mcg/mL	HPLC/UV
Carisbamate	Human Plasma	5	ng/mL	LC-MS/MS
Chlorzoxazone	Human Plasma	20	ng/mL	LC-MS/MS
Citalopram	Plasma	100	pg/mL	LC-MS/MS
Clonazepam / 7-Aminoclonzepam	Human Plasma	0.1 / 0.2	ng/mL	LC-MS/MS
Cyclobenzaprine	Dog Plasma	0.1	ng/mL	LC-MS/MS
Cyclobenzaprine	Human Plasma	0.2	ng/mL	LC-MS/MS
Doxepin / Nordoxepin	Human Urine	0.25 / 0.20	ng/mL	LC-MS/MS
Femoxetine / N-Desmethylofemoxetine	Human Plasma	5	ng/mL	HPLC/FL
Femoxetine / N-Desmethylofemoxetine	Monkey Plasma	5	ng/mL	HPLC/FL
Haloperidol	Human Plasma	25	pg/mL	LC-MS/MS
Hydroxymephenytoin, (R)-4- / Hydroxymephenytoin, (S)-4-	Human Plasma	10	ng/mL	LC-MS/MS
Hydroxymephenytoin, (R)-4- / Hydroxymephenytoin, (S)-4-	Human Saliva	10	ng/mL	LC-MS/MS
Hydroxymephenytoin, (R)-4- / Hydroxymephenytoin, (S)-4-	Human Urine	0.1	mcg/mL	LC-MS/MS
Hydroxymidazolam, $\alpha$ - / Hydroxymidazolam, 4-	Dog Plasma	2 / 2	ng/mL	LC-MS/MS
Hydroxymidazolam, $\alpha$ - / Hydroxymidazolam, 4-	Rat Plasma	2 / 2	ng/mL	LC-MS/MS
Imipramine / Desipramine	Human Plasma	0.1	ng/mL	LC-MS/MS
Lorazepam	Human Plasma	0.2	ng/mL	LC-MS/MS
Memantine	Human Plasma	0.5	ng/mL	LC-MS/MS
Memantine N-Glucuronide	Human Plasma	0.2	ng/mL	LC-MS/MS
Mephenytoin, (R)- / Mephenytoin, (S)-	Human Plasma	10	ng/mL	LC-MS/MS
Mephenytoin, (R)- / Mephenytoin, (S)-	Human Saliva	10	ng/mL	LC-MS/MS
Mephenytoin, (R)- / Mephenytoin, (S)-	Human Urine	0.1	mcg/mL	LC-MS/MS
Methocarbamol	Human Plasma	0.1	mcg/mL	HPLC/FL
Methylphenidate	Human Plasma	0.1	ng/mL	LC-MS/MS
Midazolam / 1-Hydroxymidazolam / 4- Hydroxymidazolam	Human Urine	10 / 2 / 2	ng/mL	LC-MS/MS
Midazolam / $\alpha$ -Hydroxymidazolam	Human Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Midazolam / $\alpha$ -Hydroxymidazolam	Human Urine	20 / 0.5	ng/mL	LC-MS/MS
Molindone	Human Plasma	0.25	ng/mL	LC-MS/MS
Olanzapine	Human Plasma	0.1	ng/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Ondansetron	Human Plasma	0.5	ng/mL	LC-MS/MS
Paroxetine	Human Plasma	0.2	ng/mL	LC-MS/MS
Phenytoin	Human Plasma	0.25	mcg/mL	HPLC/UV
Phenytoin	Human Urine	1	mcg/mL	HPLC/UV
Phenytoin / Phenylhydantoin / Phenobarbitol (Free Assay)	Human Urine	0.1	mcg/mL	HPLC/UV
Primidone	Human Plasma	25	ng/mL	LC-MS/MS
Risperidone	Human Plasma	0.1	ng/mL	LC-MS/MS
Ropinirole	Human Plasma	20	pg/mL	LC-MS/MS
Ropinirole	Mini-Pig Plasma	20	pg/mL	LC-MS/MS
Sumatriptan	Human Plasma	0.5	ng/mL	LC-MS/MS
Temazepam	Human Plasma	20	ng/mL	LC-MS/MS
Tizanidine	Human Plasma	0.1	ng/mL	LC-MS/MS
Topiramate	Plasma	10	ng/mL	LC-MS/MS
Valproic Acid	Human Plasma	0.5	mcg/mL	LC-MS/MS
Venlafaxine / O-Desmethylvenlafaxine	Human Plasma	2.5	ng/ml	LC-MS/MS
Zolpidem	Human Plasma	0.5	ng/mL	LC-MS/MS
Zolmitriptan / N-Desmethylzolmitriptan	Human Plasma	0.1 / 0.1	ng/mL	LC-MS/MS
Zonisamide	Human Serum	50	ng/mL	HPLC/UV

Analyte	Matrix	LLOQ	Unit	Platform
Acetaminophen (APAP)	Human Plasma	0.1	mcg/mL	LC-MS/MS
Acetylsalicylic Acid / Salicylic Acid	Human Plasma	25 / 50	ng/mL	HPLC/UV
Brompheniramine / Chlorpheniramine / Pseudoephedrine	Human Plasma	0.5 / 0.5 / 5	ng/mL	LC-MS/MS
Chlorpheniramine	Human Plasma	0.5	ng/mL	LC-MS/MS
Dextromethorphan	Human Plasma	50	pg/mL	LC-MS/MS
Dextromethorphan / 3-Hydroxymorphinan / 4-Methoxymorphinan	Human Plasma	10	ng/mL	HPLC/FL
Dextromethorphan / 3-Hydroxymorphinan / 4-Methoxymorphinan	Human Urine	0.25	mcg/mL	HPLC/FL
Dextrorphan	Human Plasma	10	ng/mL	HPLC/FL
Dextrorphan	Human Urine	250	ng/mL	HPLC/FL
Diphenhydramine	Human Plasma	1	ng/mL	LC-MS/MS
Fexofenadine	Human Plasma	1	ng/mL	LC-MS/MS
Guaifenesin / Naproxen	Human Plasma	10 / 250	ng/mL	LC-MS/MS
Ibuprofen	Human Plasma	0.25	mcg/mL	LC-MS/MS
Naproxen	Human Plasma	250	ng/mL	LC-MS/MS
Phenylephrine	Human Plasma	0.5	ng/mL	LC-MS/MS
Phenylephrine	Human Urine	5	ng/mL	LC-MS/MS

1A2				
Cimetidine	Human Plasma	50	ng/mL	Inhibitor
Ciprofloxacin	Human Serum	10	ng/mL	Inhibitor
Phenacetin / Acetaminophen †	<i>in vitro</i>			Substrate
Rifampin	Human DBS	200	ng/mL	Inducer
Theophylline *	Human Plasma	50	ng/mL	Inhibitor

2A6				
Coumarin / 7-Hydroxycoumarin †	<i>in vitro</i>			Substrate
Rifampin	Human DBS	200	ng/mL	Inhibitor

2B6				
Bupropion / Hydroxybupropion	<i>in vitro</i>			Substrate
Efavirenz	Human Plasma	50	ng/mL	Substrate
Efavirenz / 8-Hydroxyefavirenz	<i>in vitro</i>			Substrate

2C8				
Amodiaquine / N-Desethylamodiaquine	<i>in vitro</i>			Substrate
Gemfibrozil	Human Plasma	0.5	mcg/mL	Inhibitor
Paclitaxel / 6 $\alpha$ -Hydroxypaclitaxel	<i>in vitro</i>			Substrate

2C9				
Amiodarone / Desethylamiodarone	Human Plasma	10	ng/mL	Inhibitor
Carbamazepine	Human Plasma	0.05	mcg/mL	Inducer
Cimetidine	Human Plasma	50	ng/mL	Inhibitor
Diclofenac / 4'-Hydroxydiclofenac	<i>in vitro</i>			Substrate
Phenytoin	Human Plasma	0.25	mcg/mL	Inducer
Rifampin	Human DBS	200	ng/mL	Inducer
Tolbutamide / 4'-Hydroxytolbutamide	Human Plasma	0.25 / 0.5	ng/mL	

2C19				
Carbamazepine	Human Plasma	0.05	mcg/mL	Inducer
Cimetidine	Human Plasma	50	ng/mL	Inhibitor
Esomeprazole	Human Plasma	0.25	ng/mL	Substrate
Lansoprazole	Human Plasma	0.25	ng/mL	Substrate
Mephenytoin, (S-) / 4'-Hydroxy-(S)-Mephenytoin †	<i>in vitro</i>			Substrate
Omeprazole	Human Plasma	5	ng/mL	Inhibitor / Substrate
Pantoprazole	Human Plasma	10	ng/mL	Substrate
Phenytoin	Human Plasma	0.25	mcg/mL	Inducer

2D6				
Atomoxetine	Human Plasma	10	ng/mL	Substrate
Dextromethorphan / Dextrorphan	Human Plasma	0.05 / 10	ng/mL	Substrate
Dextromethorphan / Dextrorphan †	<i>in vitro</i>			Substrate
Imipramine / Desipramine *	Human Plasma	0.1	ng/mL	Inhibitor
Paroxetine	Human Plasma	100	pg/mL	Inhibitor
Quinidine	Human Plasma	10	ng/mL	Inhibitor

2E1				
Chlorzoxasone / 6-Hydroxyclozoxasone †	<i>in vitro</i>			Substrate

2J2				
Ebastine	Human Plasma	10	ng/mL	Substrate
Ebastine	<i>in vitro</i>			Substrate

3A4 / 3A5				
Atorvastatin / p- and o-Hydroxyatorvastatin	Human Plasma	0.2 / 0.2 / 0.2	ng/mL	Substrate
Atorvastatin / o-Hydroxyatorvastatin	<i>in vitro</i>			Substrate
Bupirone / 1-PP	Human Plasma	100	pg/mL	Substrate
Carbamazepine	Human Plasma	0.05	mcg/mL	Inducer
Cimetidine	Human Plasma	50	ng/mL	Inhibitor
Dexamethasone	Human Plasma	0.25	ng/mL	Inducer
Diltiazem / N-Desmethyl- / Desacetyl-	Human Plasma	4 / 2 / 1	ng/mL	Inhibitor
Felodipine	Human Plasma	1/25/1900	pg/mL	Substrate
Imipramine / Desipramine	Human Plasma	0.1	ng/mL	Inhibitor
Ketoconazole	Human Plasma	50	ng/mL	Inducer
Midazolam / $\alpha$ -Hydroxymidazolam	Human Plasma	0.5 / 0.5	ng/mL	Substrate
Midazolam / $\alpha$ -Hydroxymidazolam †	<i>in vitro</i>			Substrate
Nifedipine	<i>in vitro</i>			Substrate
Phenytoin	Human Plasma	0.25	mcg/mL	Inducer
Rifampin *	Human DBS	200	ng/mL	Inducer
Simvastatin / Simvastatin Hydroxy Acid *	Human Plasma	50 / 50	pg/mL	Inhibitor
Testosterone / 6- $\beta$ -Hydroxytestosterone †	<i>in vitro</i>			Substrate
Venlafaxine / O-Desmethylvenlafaxine	Human Plasma	2.5	ng/mL	Inhibitor



# Flow Cytometry Panels

## Preclinical

Panel Name	Analyte
Rat TBNK Panel	CD 3, CD45RA, CD161a, CD45

## Clinical

Panel Name	Analyte
Immune Monitoring Basic Panel	CD16, CD56, CD19, CD14, CD4, CD8, CD3, CD45
Immune Monitoring T Cell Subsets Panel	CD45RA, CCR7, CD28, PD1, CD27, CD4, CD8, CD3, CD57, CD45
Immune Monitoring T Cell Receptors (TCR)	TCR $\gamma\delta$ , TCR $\alpha\beta$ , HLA-DR, TCR $\delta 1$ , CD4, CD8, CD2, TCR V $\delta 2$ , CD 45
Immune Monitoring B Cell Panel	IgD, CD21, CD19, CD27, CD24, CD38, IgM, CD45
Immune Monitoring Dendritic Cell Panel	CD16, Lin (CD3/CD19/CD20/CD14/CD56), CD1c, CD11c, Clec9A, CD123, HLA-DR, CD45

30 markers  
 Absolute counts  
 4 Anti-coagulant : K(2)EDTA, NaHEPARIN, ACD, BCT  
 14 day stability

Analyte	Matrix	LLOQ	Unit	Platform
Allopurinol / Oxypurinol	Human Plasma	50 / 100	ng/mL	LC-MS/MS
Atorvastatin / p- and o-Hydroxyatorvastatin	Human Plasma	0.2 / 0.2 / 0.2	ng/mL	LC-MS/MS
Esomeprazole	Human Plasma	0.25	ng/mL	LC-MS/MS
Fenofibric Acid	Human Plasma	20	ng/mL	LC-MS/MS
Gemfibrozil	Human Plasma	0.5	mcg/mL	HPLC/UV
Gliclazide	Human Plasma	100	ng/mL	HPLC/UV
Metformin	Human Plasma	20	ng/mL	LC-MS/MS
Methylprednisolone	Human Plasma	2.5	ng/mL	LC-MS/MS
Lansoprazole	Human Plasma	0.25	ng/mL	LC-MS/MS
Omeprazole	Human Plasma	5	ng/mL	LC-MS/MS
Oxandrolone	Human Plasma	0.25	ng/mL	LC-MS/MS
Paraxanthine	Human Plasma	25	ng/mL	HPLC/UV
Simvastatin / Simvastatin Hydroxy Acid	Human Plasma	50 / 50	pg/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Alprazolam / $\alpha$ -Hydroxyalprazolam	Human Plasma	0.5	ng/mL	LC-MS/MS
Buprenorphine / Norbuprenorphine	Human Plasma	50	ng/mL	LC-MS/MS
Codeine	Human Plasma	1	ng/mL	LC-MS/MS
Hydrocodone	Human Plasma	0.1	ng/mL	LC-MS/MS
Hydromorphone (Anticoagulant: K <sub>2</sub> EDTA)	Human Plasma	40	pg/mL	LC-MS/MS
Hydromorphone (Anticoagulant: Sodium Heparin)	Human Plasma	75	pg/mL	LC-MS/MS
Lorazepam	Human Plasma	0.2	ng/mL	LC-MS/MS
Midazolam / $\alpha$ -Hydroxymidazolam	Human Plasma	0.5	ng/mL	LC-MS/MS
Methylphenidate	Human Plasma	0.1	ng/mL	LC-MS/MS
Morphine / Morphine-3- $\beta$ -D-Glucuronide / Morphine-6- $\beta$ -D-Glucuronide	Human Plasma	0.5 / 5 / 2	ng/mL	LC-MS/MS
Noroxycodone / Oxycodone	Human Plasma	0.25	ng/mL	LC-MS/MS
Oxymorphone	Human Plasma	0.25	ng/mL	LC-MS/MS
Zolpidem	Human Plasma	0.5	ng/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Acyclovir	Human Plasma	20	ng/mL	HPLC/FL
Acyclovir	Human Urine	1	mcg/mL	HPLC/FL
Amikacin	Human Serum	0.15	mcg/mL	LC-MS/MS
Amikacin	Human Urine	0.5	mcg/mL	LC-MS/MS
Amoxicillin	Plasma	0.25	mcg/mL	HPLC/UV
Ampicillin	Plasma	0.25	mcg/mL	HPLC/UV
Azithromycin	Human Plasma	2	ng/mL	LC-MS/MS
Cefaclor	Plasma	0.5	mcg/mL	HPLC/UV
Cefadroxil	Plasma	0.25	mcg/mL	HPLC/UV
Cefdinir	Plasma	25	ng/mL	HPLC/UV
Cefixime	Plasma	50	ng/mL	HPLC/UV
Cefprozil	Plasma	0.25	mcg/mL	HPLC/UV
Ciprofloxacin	Cat Plasma	25	ng/mL	HPLC/FL
Ciprofloxacin	Human Serum	10	ng/mL	LC-MS/MS
Clarithromycin	Human Plasma	10	ng/mL	LC-MS/MS
Clavulanic Acid	Plasma	10	ng/mL	HPLC/UV
Clindamycin	Plasma	100	ng/mL	LC-MS/MS
Clotrimazole / Ketoconazole	Human Plasma	5 / 50	ng/mL	LC-MS/MS
Doxycycline	Plasma	50	ng/mL	HPLC/UV
Erythromycin A	Plasma	0.1	mcg/mL	HPLC/EC
Fluconazole	Plasma	50	ng/mL	HPLC/UV
Efavirenz	Human Plasma	50	ng/mL	LC-MS/MS
Ethambutol	Human DBS	100	ng/mL	LC/MS/MS
Ibuprofen	Human Plasma	0.25	mcg/mL	LC-MS/MS
Interferon $\beta$ 1 (IFN- $\beta$ 1)	Human Plasma	2	pg/mL	ELISA
Interferon- $\gamma$ (IFN- $\gamma$ )	Human Plasma	15	pg/mL	ELISA
Ketoconazole	Human Plasma	50	ng/mL	HPLC/FL
Ketoconazole / Clotrimazole	Human Plasma	50 / 5	ng/mL	LC-MS/MS
Levofloxacin	Rabbit Plasma	0.2	mcg/mL	LC-MS/MS
Moxifloxacin	Human DBS	100	ng/mL	LC-MS/MS
Moxifloxacin	Human Plasma	20	ng/mL	LC-MS/MS
Naproxen	Human Plasma	0.5	mcg/mL	HPLC/FL
Nitrofurantoin	Human Plasma	5	ng/mL	HPLC/UV
Nitrofurantoin	Human Urine	2	mcg/mL	HPLC/UV
Pyrazinamide	Human DBS	10	mcg/mL	LC-MS/MS
Ribavirin	Human Plasma	5	ng/mL	LC-MS/MS
Rifampin	Human DBS	200	ng/mL	LC-MS/MS
Tenofovir	Human Plasma	10	ng/mL	LC-MS/MS
Terbinafine	Human Nail	200	mcg/g	LC-MS/MS
Terbinafine / N-Desmethylterbinafine	Human Plasma	40	pg/mL	LC-MS/MS

Analyte	Matrix	LLOQ	Unit	Platform
Azacytidine, 5-	Human Plasma	10	ng/mL	LC-MS/MS
Bicalutamide	Human Plasma	2.5	ng/mL	LC-MS/MS
Cytarabine (Ara-C)	Human Plasma	20	ng/mL	LC-MS/MS
Doxorubicin	Human Urine	1.5	ng/mL	LC-MS/MS
Doxorubicin / Doxorubicinol	Human Plasma	0.5 / 0.5	ng/mL	LC-MS/MS
Gemcitabine	Human Plasma	40	ng/mL	HPLC/UV
Gemcitabine	Human Urine	40	ng/mL	HPLC/UV
Melphalan	Human Plasma	25	ng/mL	LC-MS/MS
Paclitaxel	Human Urine	5	ng/mL	LC-MS/MS
Paclitaxel	Human Plasma	100	pg/mL	LC-MS/MS
Paclitaxel	Human Plasma	1	ng/mL	LC-MS/MS
Tretinoin	Human Plasma	1	ng/mL	LC-MS/MS