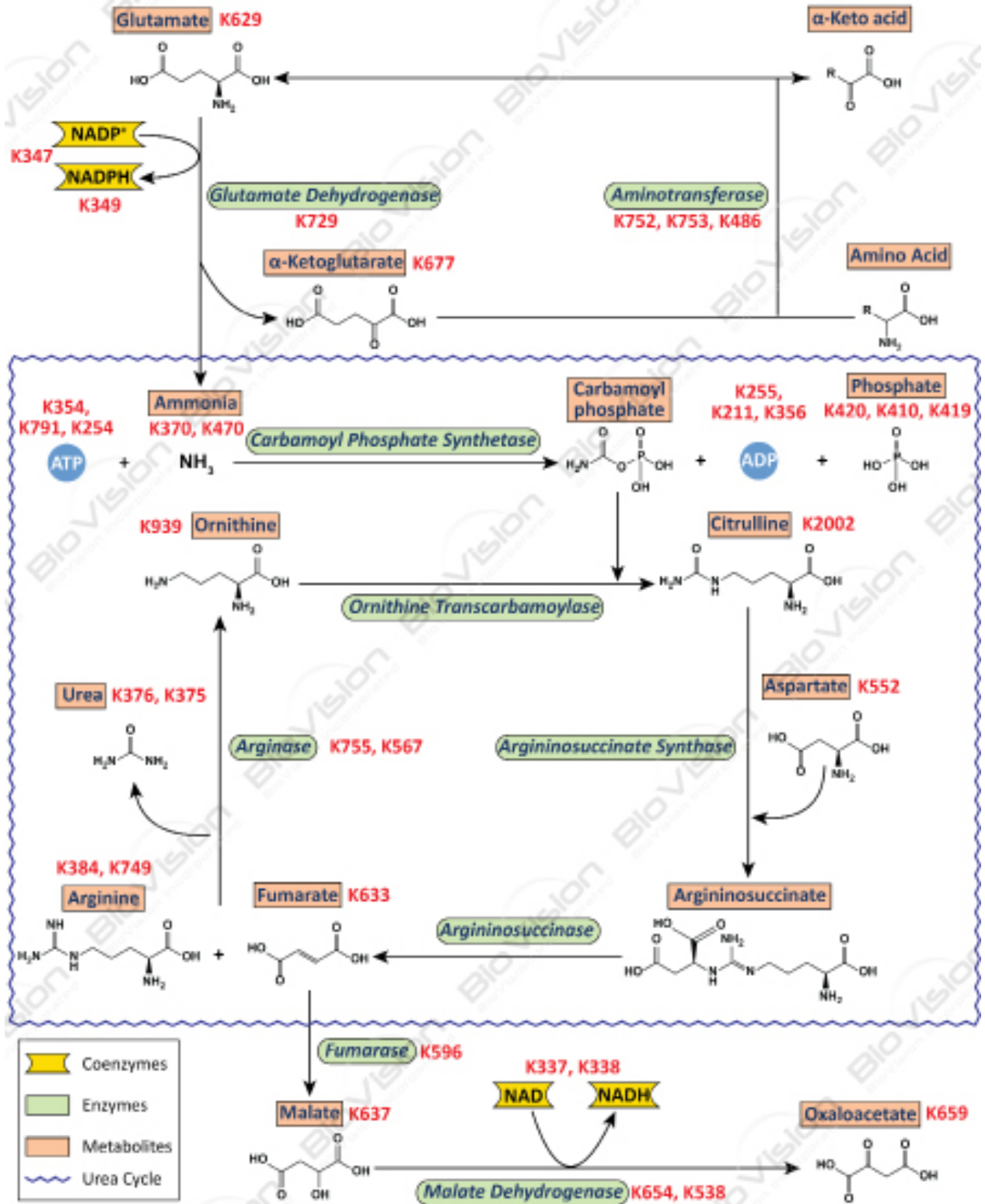


Urea Cycle

Mammals excrete excess nitrogen via the Urea cycle: urea is synthesized in liver, secreted into the bloodstream, delivered to the kidneys where it is finally excreted in urine. The Urea cycle involves five enzymatic reactions, the first two steps are mitochondrial and the last three reactions are cytosolic. BioVision offers one of the most complete series of assays measuring various metabolites, cofactors, enzymes involved in this pathway.



The simplest, yet sensitive series of assays in the market!!!

Key Features:

- **Non-radioactive**, homogeneous assays
- **Specific** assays
- **Convenient**: minimal sample preparation; fast protocols (1-2 hours)
- **Cost effective**: 100 assays; **High Throughput Screening compatible**
- **Validated**: using mammalian tissues, cells, biological fluids

	Product Name	Cat. No.	Detection Limit	Sample Type
Metabolite	Ammonia (C)	K370	1 nmol	Urine, Cell Lysate
	Ammonia (C)	K470	0.5 nmol	Cell/Tissue lysate
	Arginine (C)	K749	5 nmol	Serum, beverages
	Arginine (F)	K384	0.25 nmol	Serum, plasma, lysate
	Aspartate (C/F)	K552	0.1 nmol	Serum, tissue lysate
	Citrulline	K2002	2 µM	Serum, fruit juices
	Fumarate (C)	K633	1 nmol	Cell/Tissue lysate
	Glutamate* (C)	K629	1 nmol	Serum, foodstuff
	α -ketoglutarate* (C/F)	K677	0.1 nmol	Cell/Tissue lysate
	Malate* (C)	K637	1 nmol	Serum, lysates
	Ornithine (F)	K939	0.1 nmol	Serum, tissue lysate
	Oxaloacetate* (C/F)	K659	1 nmol	Serum, lysates
	Phosphate (C)	K410	0.5 nmol	Serum, urine
	Phosphate (F)	K420	0.1 nmol	Serum, lysates
	Urea (C)	K375	0.5 nmol	Serum, urine
Urea (C)	K376	10 nmol	Urine, serum, lysates	
Enzyme	Alanine Aminotransferase (ALT)* (C/F)	K752	10 mU	Serum, lysates
	Arginase (C)	K755	1 mU	Cell/Tissue lysate
	Arginase (Inhibitor Screening) (C)	K567	N/A	Inhibitors
	Aspartate Aminotransferase* (C)	K753	10 mU	Serum, lysates
	Fumarase* (C)	K596	0.1 mU	Cell/Tissue lysate
	Glutamate Dehydrogenase* (C)	K729	0.01 mU	Cell/Tissue lysate
	Malate Dehydrogenase* (C)	K654	0.5 mU	Cell/Tissue lysate
	Malate Dehydrogenase* (F)	K538	0.04 mU	Cell/Tissue lysate
Tyrosine Aminotransferase* (F)	K486	4 µU	Cell/tissue lysates	
Coenzymes & cofactors	ADP (C)	K356	1000 pmol	Tissue, cells, PP
	ADP (C/F)	K355	100 pmol	Tissue, cells, PP
	ATP (C/F)	K354	100 pmol	Tissue, cells, PP
	ADP/ATP Ratio (L)	K255	< 10 pmol	Cells, PP
	NADH (F)	K338	< 0.5 pmol	Tissue, cells, PP
	NAD/NADH Ratio (C)	K337	10 pmol	Tissue, cells, serum, urine
	NADP/NADPH Ratio (C)	K347	10 pmol	Tissue, cells, PP

*Does not part of the Urea Cycle; C: Colorimetric; F: Fluorometric; L: Luminometer; PP: Protein Preparation

Please visit www.BioVision.com to see the full range of Urea Cycle Assays and check out our flyers.