

# Nucleotide phosphates, TCA cycle, and amino acids

## Nucleotide phosphates

- ATP\*
- ADP\*
- AMP\*
- CTP
- CDP
- CMP
- UTP
- UDP
- UMP
- GTP
- GDP
- GMP
- cAMP\*\*

## TCA cycle

- pyruvate
- alpha-ketoglutarate
- malate
- succinate\*
- cis-aconitate
- fumarate\*
- citrate
- isocitrate

## Amino acids

- alanine
- arginine
- asparagine
- aspartic acid
- glutamine
- glutamic acid \*
- glycine \*\*
- histidine
- isoleucine \*
- leucine \*
- lysine
- methionine
- phenylalanine
- proline
- serine
- threonine
- tryptophan
- tyrosine
- valine

\*Absolute quantification is available

\*\* Just upon specific request