

## Supplemental Material

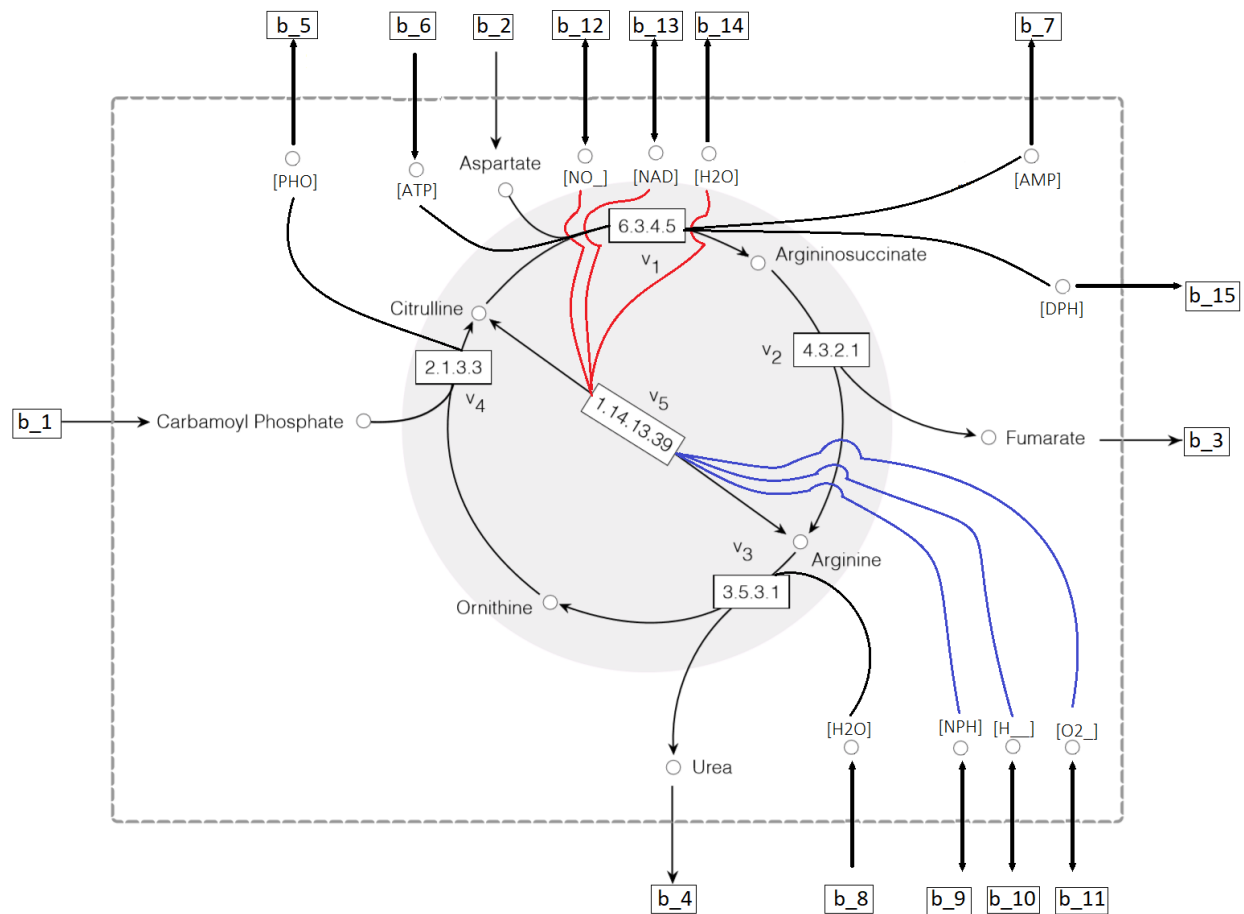
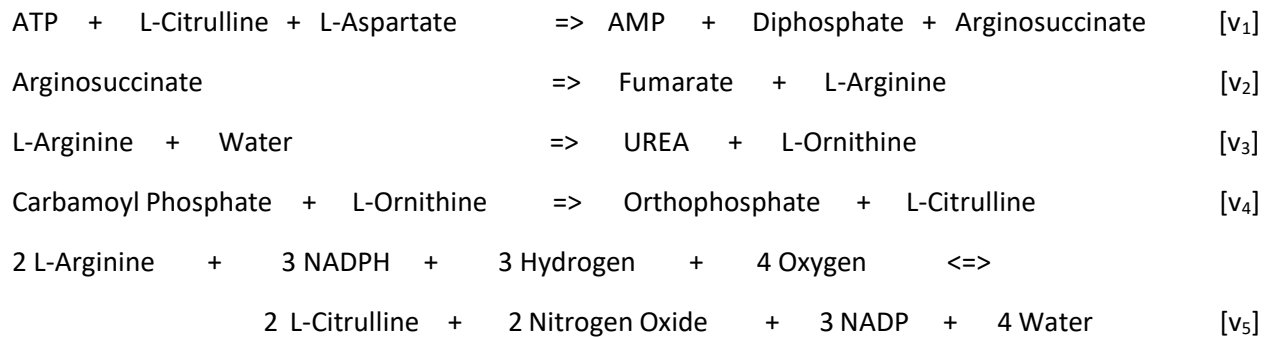
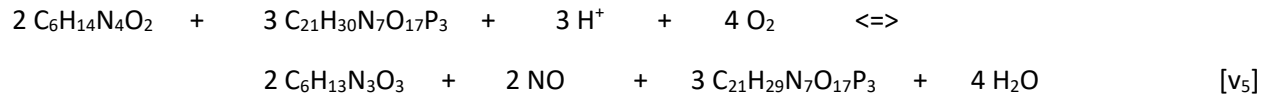
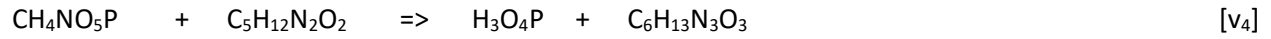
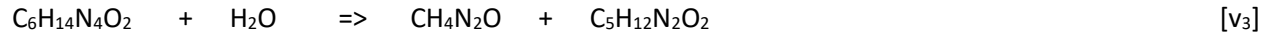
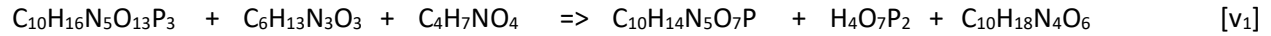


Figure 1: Reaction Pathway Scheme with Sources and Sinks depicted with b\_# and reactions as v\_#

### List of Reactions:



### List of Reactions (Elements)



Sources:

[https://www.genome.jp/kegg-bin/show\\_pathway?map00220](https://www.genome.jp/kegg-bin/show_pathway?map00220)

Varner, J. (2019, 3 11). CHEME-7770-Cornell-S19. Retrieved from Github.com:  
<https://github.com/varnerlab/CHEME-7770-Cornell-S19/blob/master/src/PS3/Flux.jl>

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Park et al Nat Chem Biol 12:482-9, 2016