

**S3 Table: Compartments included in the model.** This table describes the three compartments included in the model and their volumes.

Compartment	Volume	Reference
Cytosol	$1.5 \cdot 10^{-12} \frac{l}{cell}$	[1, 2]
Mitochondria	$7.5 \cdot 10^{-13} \frac{l}{cell}$	[1, 2]
Extracellular	1 l	

#### References

1. Uhal BD, Roehrig KL. Effect of dietary state on hepatocyte size. Biosci Rep. 1982;2(12):1003-7. Epub 1982/12/01. PubMed PMID: 7165791.
2. Kuntz E. Hepatology, textbook and atlas. 3rd ed. New York: Springer; 2008.