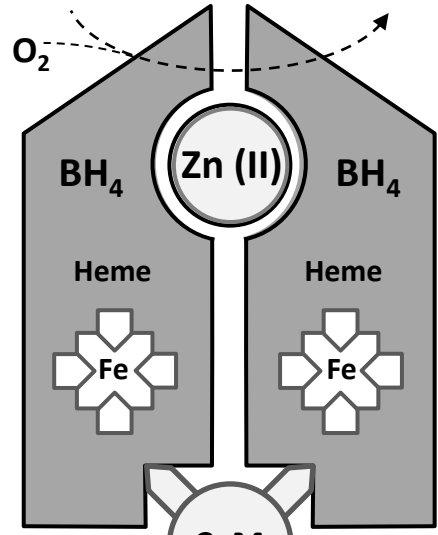
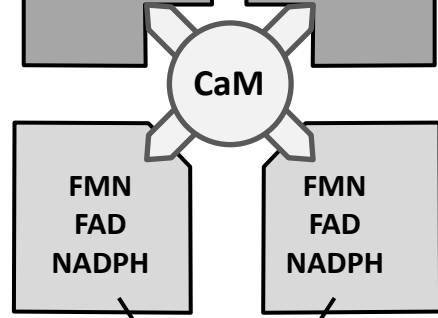


L-Arginine

•NO + L-Citrulline

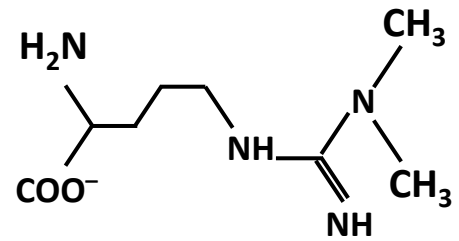
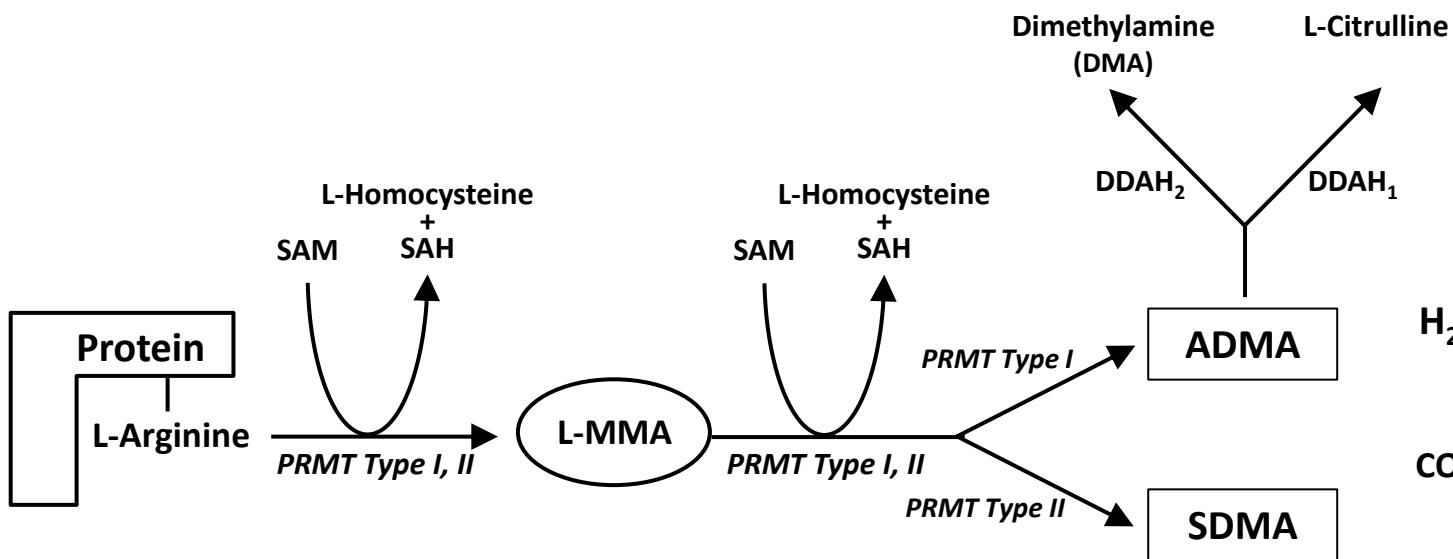


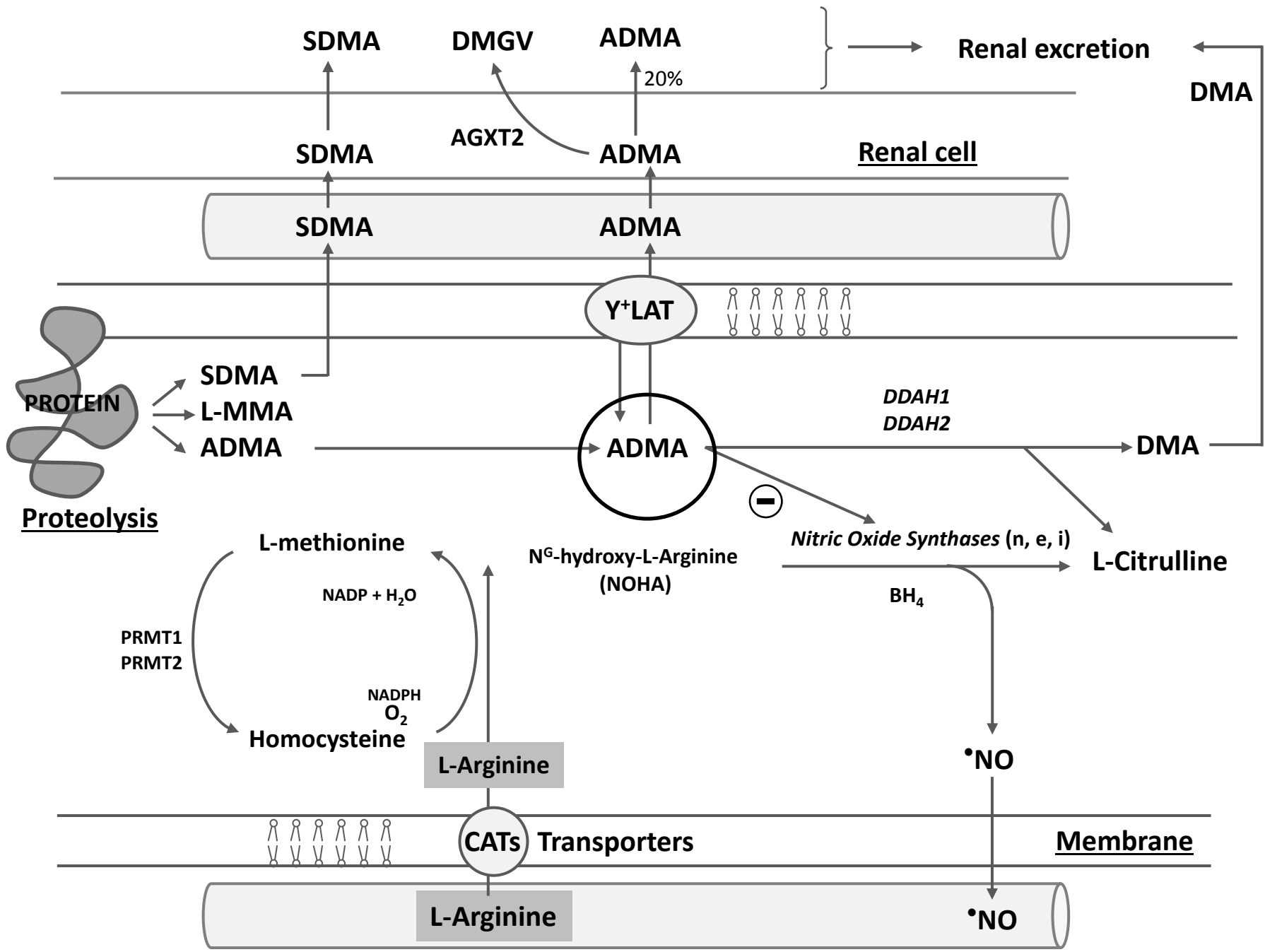
Oxygenase domain



Reductase domain

NADPH⁺ + H₂O





Proteolysis

Renal cell

Membrane

ADMA

Y⁺LAT

ADMA

SDMA

SDMA

SDMA

DMGVA

ADMA

Renal excretion

DMA

DMA

L-Citrulline

L-Arginine

L-Arginine

N^G-hydroxy-L-Arginine (NOHA)

Nitric Oxide Synthases (n, e, i)

BH₄

•NO

•NO

PRMT1
PRMT2

L-methionine

NADP + H₂O

Homocysteine

NADPH
O₂

Transporters

20%

AGXT2

DDAH1
DDAH2

⊖

CAT : Cationic amino acid transporter

DMA : Dimethylamine

AGXT2 : Alanine-glyoxylate aminotransferase-2 (expressed in Kidney and Liver)

DGV : Symmetrical and asymmetrical dimethylguanidino valeric acid

PRMT : protein arginine *N*-methyltransferase

DDAH : dimethylarginine dimethylaminohydrolase

Y+LAT : Y+L AA Transporter