

# **Cellular engineering and biocatalysis strategies toward sustainable cadaverine production: State of the art and perspectives**

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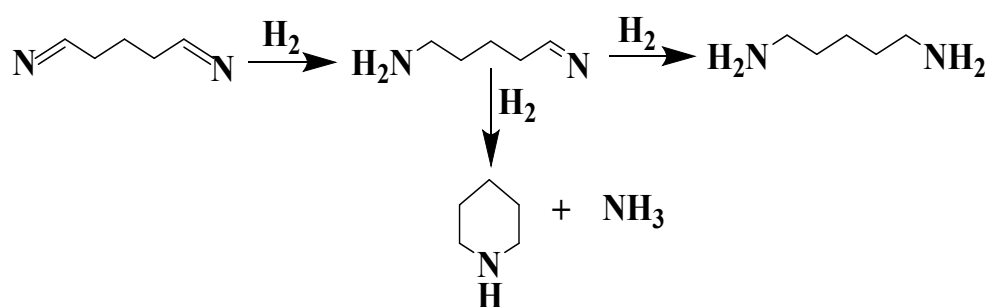
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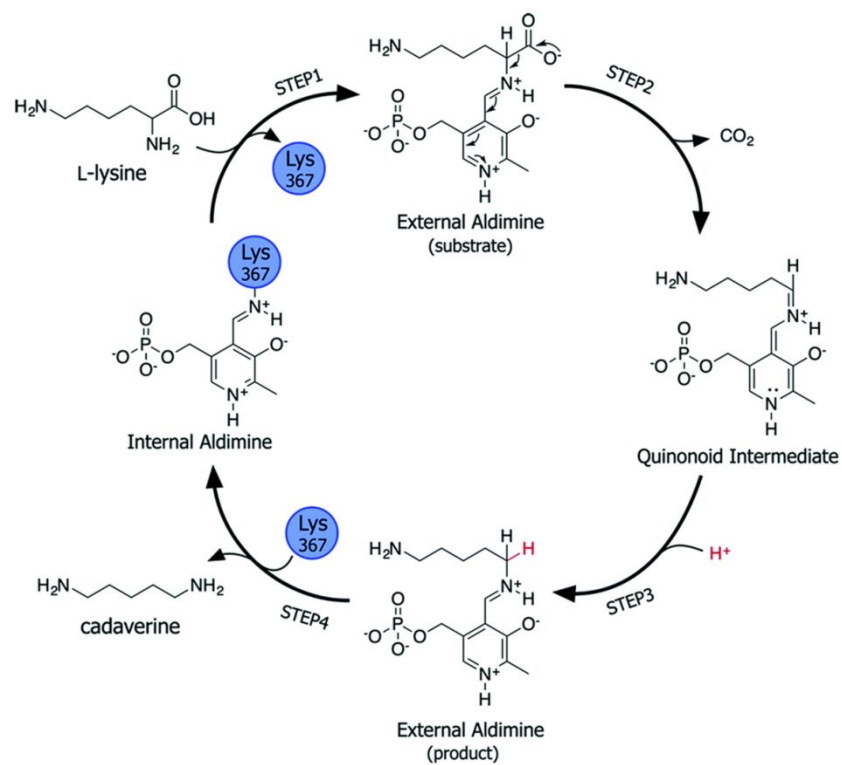
**Table S1** Comparison of the mechanical properties of petrochemical PA 6, PA 66 and bio-based PA 510.

Property	Pure		
	PA 6	PA 66	PA 510
Bio-based content [%]	0	0	100
Viscosity number [mL g <sup>-1</sup> ]	150	150	141
Melting point [°C]	220	260	215
Glass transition temperature [°C]	54	60	50
Density [g cm <sup>-3</sup> ]	1.14	1.14	1.07
Water absorption [%]	3	2.8	1.8
Haze	102	102	64
<b>30% glass fiber content (by 23 °C dry)</b>			
Tensile strength [MPa]	179	188	155
Elongation at break [%]	3.8	3.7	3.9
E-modulus [MPa]	9424	9586	8310
Impact strength, notched [kJ m <sup>-2</sup> ]	15	10	12
Impact strength, unnotched [kJ m <sup>-2</sup> ]	99	83	86

Data from previously published paper.<sup>20</sup>



**Figure S1.** Cadaverine synthesis with glutaronitrile hydrogenation.



**Figure S2.** The suggested mechanism for lysine decarboxylase.