

## Supplemental material

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Table S1. Nomenclature and characteristics of SOD enzymes across various species

Species	Isoforms		Metal cofactor	Location	References
	Gene	Protein			
<i>Escherichia coli</i>	sodA	SodA	Manganese	Cytoplasm	(Keele et al., 1970)
	sodB	SodB	Iron	Cytoplasm	(Yost and Fridovich, 1973)
	sodC	SodC	Copper and zinc	Periplasmic space	(Imlay and Imlay, 1996)
<i>Saccharomyces cerevisiae</i>	SOD1	SOD1	Copper and zinc	Cytoplasm and mitochondrial intermembrane space	(Sturtz et al., 2001)
	SOD2	SOD2	Manganese	Mitochondrial matrix	(Ravindranath and Fridovich, 1975)
<i>C. elegans</i>	sod-1	SOD-1	Copper and zinc	Cytoplasm	(Larsen, 1993)
	sod-2	SOD-2	Manganese	Mitochondrial matrix	(Hunter et al., 1997)
	sod-3	SOD-3	Manganese	Mitochondrial matrix	(Hunter et al., 1997)
	sod-4	SOD-4	Copper and zinc	Extracellular space and plasma membrane	(Fujii et al., 1998)
	sod-5	SOD-5	Copper and zinc	Cytoplasm	(Jensen and Culotta, 2005)
<i>Drosophila</i>	Sod1	SOD1	Copper and zinc	Cytoplasm and mitochondrial intermembrane space	(Campbell et al., 1986)
	Sod2	SOD2	Manganese	Mitochondrial matrix	(Duttaroy et al., 1997)
	Sod3	SOD3	Copper and zinc	Extracellular space and plasma membrane	(Jung et al., 2011; Blackney et al., 2014)
Rodent	Sod1	SOD1	Copper and zinc	Cytoplasm, mitochondrial intermembrane space, nucleus, and peroxisomes	(Chang et al., 1988)
	Sod2	SOD2	Manganese	Mitochondrial matrix	(Jones et al., 1995)
	Sod3	SOD3/ecSOD	Copper and zinc	Extracellular matrix and endothelial surface	(Folz et al., 1997)
Human	SOD1	SOD1	Copper and zinc	Cytoplasm and mitochondrial intermembrane space, and nucleus	(Levanon et al., 1985)
	SOD2	SOD2	manganese	mitochondrial matrix	(Wan et al., 1994)
	SOD3	SOD3/ecSOD	copper and zinc	extracellular matrix and endothelial surface	(Strålin et al., 1995; Antonyuk et al., 2009)

Table S2 is a separate PDF showing Sod gene knockout mouse models and their phenotypes.

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