

Erratum

In the article “Stimulation of N-Linked Glycosylation and Lipid-Linked Oligosaccharide Synthesis by Stress Responses in Metazoan Cells” by Mark A. Lehrman, which appeared in Volume 41, Issue 2 (2006) of *Critical Reviews in Biochemistry and Molecular Biology*, Table 2 contains several errors. The correct Table 2 appears below. The publisher apologizes for this error, and directs readers to www.crbmb.com, where an electronic version of the article is available, with the correct table in place.

TABLE 2 Reagents used to study N-linked glycosylation and cellular stress responses

Reagent	Relevant Target or Reaction	Effect on N-linked glycosylation pathway	Causes ER stress? ^a	Causes cytoplasmic stress? ^a
tunicamycin	inhibitor of UDP-GlcNAc:Dol-P GlcNAc-1-P transferase (ALG7)	Direct: blocks synthesis of lipid-linked oligosaccharide	Yes	No
glucosamine	multiple effects	Indirect: Inhibits multiple steps in LLO synthesis	Yes	(No)
castanospermine; deoxynojirimycin	inhibitors of ER glucosidases I and II	Direct: prevents glucosidase processing of glycoproteins	Yes	No
deoxymannojirimycin	inhibitor of ER mannosidase I and Golgi mannosidase I	Direct: prevents mannosidase processing of glycoproteins	(Yes)	(No)
kifunensine	inhibitor of ER mannosidase I			
dithiothreitol	disulfide reductant	Indirect: via ER stress response pathways	Yes	No
thapsigargin	depletes ER Ca ²⁺ by blocking the ER Ca ²⁺ -ATPase			
azetidine-2-carboxylic acid	inhibits prolyl isomerization	Indirect: via ER stress response and cytoplasmic stress response pathways	Yes	Yes
geldanamycin	inhibits HSP-90 and GRP-94			
arsenite	inhibits enzymes containing vicinal thiols	Indirect: via cytoplasmic stress response pathways	No	Yes
diamide; disulfiram	sulfhydryl oxidant			
metformin	stimulation of mannose transport	Indirect: increased production of LLO biosynthesis substrates	No	No
	stimulates AMP-activated protein kinase	unknown		
	stimulates glycogen phosphorylase	Indirect: increased production of LLO biosynthesis substrates		
5-aminoimidazole-4-carboxamide riboside (converted intracellularly to ribotide)				

^a responses in parentheses indicated anticipated result