

**Table S2. Confidence in GO evidence codes assayed by assuming GFL prediction was independent of evidence class**

<b>Code</b>	<b>Evidence class</b>	<b>Confidence</b>
<b>TAS</b>	Traceable author statement	0.96
<b>IMP</b>	Molecular phenotype	0.93
<b>IDA</b>	Direct assay	0.92
<b>IGI</b>	Genetic interaction	0.91
<b>ISS</b>	Sequence similarity	0.83
<b>RCA</b>	Reviewed computational analysis	0.78
<b>IEP</b>	Expression profile	0.68
<b>IC</b>	Inferred by curator	NA
<b>IPI</b>	Inferred by protein interaction	NA

A baseline confidence of 0.95 was assumed for TAS, IDA, and IC combined. IC had too few examples for separate analysis; IPI was not assayed due to influence of protein interactions on zorch. Although the relative ranking may be robust, the probabilities depend on the specificity of the GO terms: we used 206 general terms.