

Supplementary Table S1. Genes involved in the synthesis of β -Glucan in yeast.

Gene	Source	Encoded protein	References
<i>cwg2+</i>	<i>Schizosaccharomyces pombe</i>	β -subunit of a geranylgeranyltransferase type I	[131]
<i>KRE6</i>	<i>S. cerevisiae</i>	Type II membrane protein	[132]
PKC1	<i>S. cerevisiae</i>	Yeast homolog of the mammalian protein kinase C family	[133]
<i>SKN1</i>	<i>S. cerevisiae</i>	Membrane protein	[134]
<i>LRG1</i>	<i>S. cerevisiae</i>	RhoGAP protein	[135]

Supplementary Table S2. Different extraction methodologies developed and used to extract protein from the different sources of β -glucan.

Source	Extraction method	Procedure	Purification method	Reference
Barley	Aqueous extraction	100 g barley flour, 500 mL water	Centrifuge (10,000 rpm), 10 min, ethanol precipitate (95% ethanol)	[136]
Oats	Alkaline extraction	100 g oat bran, 100 mL 1% NaOH, 400 mL water	Centrifuge (10 min), ethanol precipitation (95% ethanol)	[137]
Oats	Enzymatic extraction	200 g oat bran, 20 mL β -glucanase enzyme solution (10 U/mL), 480 mL water	Centrifugation at 10,000 rpm for 10 minutes, ethanol precipitation (95% ethanol)	[138]
Barley	Ultrasound-assisted extraction	Barley flour, 500 mL water	Centrifugation at 13,000 rpm for 10 minutes, ethanol precipitation (95% ethanol)	[139]
Oats	Microwave-assisted extraction	100 g oat bran, 500 mL water	Centrifugation at 10,000 rpm for 10 minutes, ethanol precipitation (95% ethanol)	[140]
Mushrooms	Alkaline extraction	100 g mushrooms, 100 mL 1% sodium hydroxide solution, 400 mL water	Centrifugation at 10,000 rpm for 10 minutes, ethanol precipitation (95% ethanol)	[141]
Yeast	Enzymatic extraction	100 g yeast, 10 mL β -glucanase enzyme solution (10 U/mL), 490 mL water	Centrifugation at 10,000 rpm for 10 minutes, ethanol precipitation (95% ethanol)	[142]

References

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