

β-D-Glucan

Cat. No.:	HY-139413
CAS No.:	9041-22-9
Target:	Toll-like Receptor (TLR)
Pathway:	Immunology/Inflammation
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)

beta-D-Glucan

SOLVENT & SOLUBILITY

In Vitro	1M NaOH : 50 mg/mL (ultrasonic and adjust pH to 12 with NaOH)
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BIOLOGICAL ACTIVITY

Description	β-D-glucan is a natural non-digestible polysaccharide and high biocompatibility that can be selectively recognized by recognition receptors such as Dectin-1 and Toll-like receptors as well as being easily internalized by murine or human macrophages, which is likely to attribute to a target delivery ^[1] . β-d-glucan is an enteric delivery vehicle for probiotics ^[2] .
In Vitro	β-D-glucan dissolved in DMSO but not water inhibits MCF-7 cell proliferation in a concentration-dependent manner as measured by BrdU incorporation with an IC ₅₀ of -164 μg/mL. β-D-glucan dissolved in DMSO inhibits tamoxifen/endocrine-resistant LCC9 and LY2 cell proliferation with IC ₅₀ values of 4.6 and 24.2 μg/mL, respectively ^[3] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Su Y, et al. pH-sensitive PEG-coated hyper-branched β-d-glucan derivative as carrier for CpG oligodeoxynucleotide delivery. Carbohydr Polym. 2020;246:116621.
- [2]. Gani A, et al. β-d-glucan as an enteric delivery vehicle for probiotics. Int J Biol Macromol. 2018;106:864-869.
- [3]. Jafaar ZM, et al. β-D-glucan inhibits endocrine-resistant breast cancer cell proliferation and alters gene expression. Int J Oncol. 2014;44(4):1365-1375.

Caution: Product has not been fully validated for medical applications. For research use only.

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