Validation data for WGP Soluble

https://www.invivogen.com/wgp

For research use only

Version 22L13-AK

Whole glucan particles (WGP) are β -glucans notable for their ability to modulate the immune response. InvivoGen provides WGP in two forms, WGP Dispersible (WGP® Dispersible), and WGP Soluble (WGP® Soluble). WGP Soluble is a soluble Saccharomyces cerevisiae β -glucan preparation that inhibits human (h)Dectin-1b-dependent responses. At the same time, it efficiently binds and activates the hDectin-1a (Figure 1). Furthermore, this soluble ligand displays an inhibitory activity when cells are incubated with particulate agonists such as Zymosan or Heat Killed Candida albicans (HKCA) and thus, can be used as a control for Dectin-1b-dependent signaling (Figure 2).

WGP® Dispersible and WGP® Soluble are registered trademarks of Biothera - Wellmune®.

Evaluation of NF-κB responses to Dectin-1 ligands HEK-Blue™ hDectin-1a HEK-Blue™ hDectin-1b HEK-Blue™ Null1-v HEK-Blue™ Null1-v

Figure 1. NF-κB responses to Dectin-1 ligands in HEK-Blue[™]-derived cell lines. HEK-Blue[™] hDectin-1a, HEK-Blue[™] hDectin-1b and HEK-Blue[™] Null I-v cells (control cell line) were incubated with particulate ligands such as Zymosan (10 μg/ml), WGP Dispersible (100 μg/ml) and HKCA (3 x106 cells/ml), or soluble ligands such as Laminarin (100 μg/ml), WGP Soluble (10 μg/ml) or TDB (10 μg/ml). TNF-α (10 ng/ml) was used as a positive control. After overnight incubation, the activation of NF-κB was assessed by measuring the activity of SEAP in the supernatant using QUANTI-Blue[™] Solution. Data are shown as optical density (OD) at 630 nm (mean ± SEM).

Dose-dependent inhibition HEK-Blue™ hDectin-1b responses by WGP Soluble

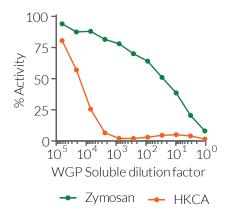


Figure 2. Dose-dependent inhibition HEK-Blue™ hDectin-1b responses by WGP Soluble. Cells were incubated with particulate ligands such as Zymosan (30 μg/ml) or HKCA (3 x10⁶ cells/ml) together with the soluble ligands WGP Soluble (highest concentration 1 mg/ml). After 24h, SEAP activity was assessed in the supernatant using QUANTI-Blue™ Solution. Data are presented as the percentage of SEAP activity over non-induced cells.



InvivoGen Asia: +852 3622-3480 E-mail: info@invivogen.com