

Validation data for HEK-Blue™ hDectin-1a cells

<http://www.invivogen.com/hek-blue-hdectin1a>

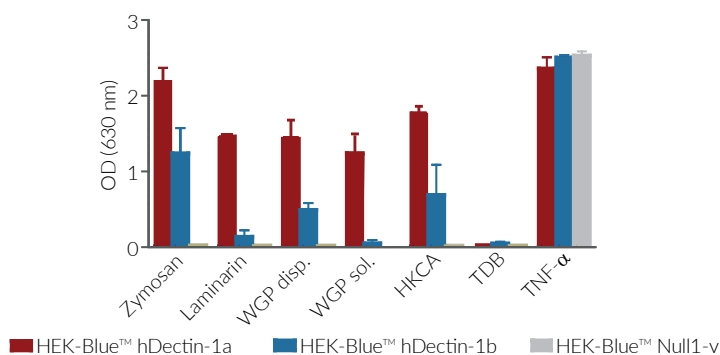
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Dectin-1 is alternatively spliced into 2 major isoforms: a full-length A isoform and a 'stalkless' B isoform, which do not induce the same response to soluble and particulate β -glucans. We have engineered HEK-Blue™ cells that stably express high levels of either human Dectin-1a or -1b isoform and an NF- κ B-inducible secreted alkaline phosphatase (SEAP) reporter gene. These cells also express genes involved in the Dectin-1 signaling pathway leading to NF- κ B activation.

HEK-Blue™ hDectin-1a reporter cells are activated by soluble or particulate Dectin-1 ligands, which demarcates them from their HEK-Blue™ hDectin-1b counterpart. HEK-Blue™ hDectin-1a cells do not respond to other CLR ligands such as trehalose-6,6-dibehenate (TDB), a Mincle ligand.

Evaluation of NF- κ B responses to Dectin-1 ligands



NF- κ B responses of HEK-Blue™ hDectin-1a and -1b and HEK-Blue™ Null 1-v cells (control cell line) to Dectin-1 ligands. Cells were incubated with particulate ligands such as Zymosan (10 μ g/ml), WGP dispersible (100 μ g/ml) and HKCA (3 $\times 10^6$ cells/ml), or soluble ligands such as Laminarin (100 μ g/ml), WGP soluble (10 μ g/ml) or TDB (10 μ g/ml). TNF- α (10 ng/ml) was used as a positive control. After 24h, SEAP activity was assessed in the supernatant using QUANTI-Blue™, by reading the optical density (OD) at 630 nm.

TECHNICAL SUPPORT

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