

Validation data for SB203580

<https://www.invivogen.com/sb203580>

For research use only

Version 22F27-MM

SB203580 is a pyridinyl imidazole inhibitor widely used to study the role of p38 mitogen-activated protein kinase (MAPK). p38 MAPK is involved in a wide array of signaling pathways, including the Toll-like receptor (TLR) signaling pathway. The ability of SB203580 to inhibit p38 MAPK was validated using InvivoGen's RAW-Lucia™ ISG cells (**Figure 1**). This reporter cell line is derived from RAW 264.7 macrophages. RAW-Lucia™ ISG cells stably express an interferon regulatory factor (IRF)-inducible Lucia luciferase reporter construct. They express all TLRs (with the exception of TLR5). Stimulation of this cell line with lipopolysaccharide from *Escherichia coli* O111:B4 (LPS-EB) activates the TLR4 pathway inducing Lucia luciferase production.

Dose-dependent p38 MAP kinase inhibition

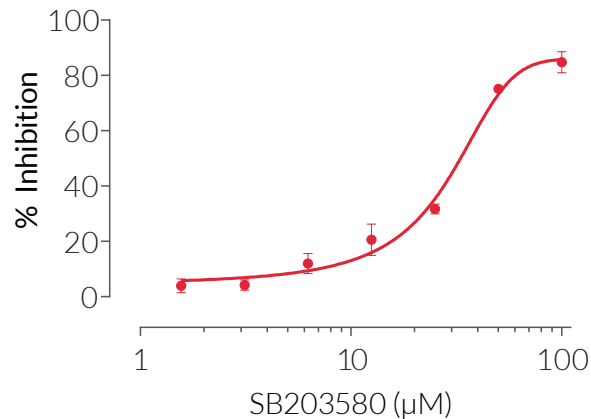


Figure 1: SB203580 is a potent inhibitor of p38 MAP kinase signaling.

RAW-Lucia™ ISG cells were incubated overnight at 37°C in the presence of increasing concentrations of SB203580 together with 100 ng/ml of LPS-EB. The next day, the inhibitory activity of SB203580 was determined by measuring the reduction of Lucia luciferase production in the supernatant using the QUANTI-Luc™ detection reagent. Data are shown as percentage (%) inhibition ± standard error of the mean (SEM).

TECHNICAL SUPPORT

InvivoGen USA (Toll-Free): 888-457-5873
InvivoGen USA (International): +1 (858) 457-5873
InvivoGen Europe: +33 (0) 5-62-71-69-39
InvivoGen Asia: +852 3622-3480
E-mail: info@invivogen.com

 **InvivoGen**
www.invivogen.com