Validation data for R406*

https://www.invivogen.com/r406

For research use only

Version 23J20-MM

R406 besylate (also known as Tamatinib besylate) is an R406 salt. R406 is the active metabolite of Fostamatinib. It is an ATP-competitive inhibitor of spleen tyrosine kinase (Syk). This enzyme plays an important role in FcγR-mediated signal transduction and inflammatory propagation. The ability of R406 to inhibit Syk was validated using InvivoGen's HEK-Blue[™] hDectin-1b cells (Figure 1). These cells were specifically designed for the study of human Dectin-1-induced Syk/CARD9 signaling by monitoring the activity of secreted embryonic alkaline phosphatase (SEAP) reporter activity. SEAP production by these cells was measured using QUANTI-Blue[™] Solution, a SEAP detection reagent. Treatment with R406 inhibited SEAP activity in a dose-dependent manner.



Figure 1. R406 inhibits Syk signaling in a dose-dependent manner. HEK-Blue™ hDectin-1b cells were incubated in the presence of increasing concentrations of R406 and the Dectin-1 agonist WGP Dispersible (100 µg/ml). After overnight incubation, the inhibitory activity of R406 on Dectin-1-induced Syk/CARD9 signaling was assessed by measuring the levels of SEAP using QUANTI-Blue™ Solution. Data are shown as percentage (%) of inhibition.

