

Validation data for STG-982

<https://www.invivogen.com/sting-conjugatable-ligands>

For research use only

Version 22G25-NJ

STG-982 is a ready-to-use “pre-linked” conjugatable STING ligand, synthesized from an analog of CL656, a well-known STING agonist. STG-982 efficiently triggers IRF- and NF- κ B-mediated cellular responses (**Figure 1**). STG-982 can be used to generate immune-stimulating antibody conjugates (ISACs) as conjugation to a Anti-HER2-hlgG1 and subsequent activation of STING has been validated using cellular assays. The Anti-HER2/STG-982 ISAC is more potent at inducing a STING-mediated response than STG-982 only in cells expressing HER2 (**Figure 2A**). Of note, at high concentrations, STG-982, Anti-HER2/STG-982 ISAC and Anti- β Gal/STG-982 ISAC, induce a STING-mediated cellular response, independently of HER2 expression (**Figure 2A and B**). This observation could be explained by cellular uptake through endocytosis/pinocytosis.

Biological activity of STG-982

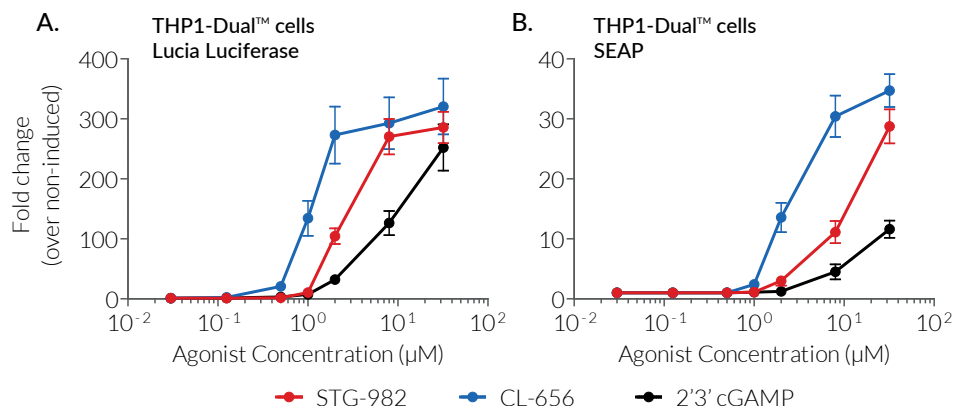


Figure 1: IRF and NF- κ B responses induced by STING conjugatable ligand STG-982.

THP1-Dual™ cells were stimulated with increasing concentrations of STG-982, CL-656, or 2'3'-cGAMP. After overnight incubation, the IRF and NF- κ B responses were determined by measuring Lucia luciferase and SEAP activity in the supernatant using QUANTI-Luc™ (A), or QUANTI-Blue™ Solution (B), respectively. Data are shown as a fold increase (mean \pm SEM) over non-induced cells.

Biological activity of STG-982 conjugated to Anti-HER2-hlgG1

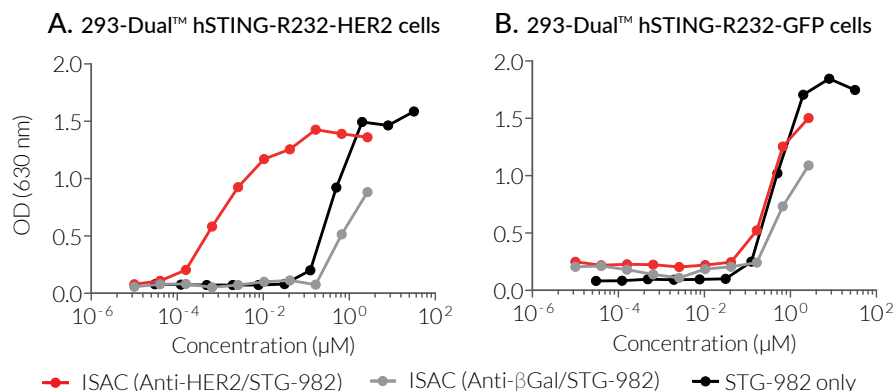


Figure 2: Dose-response of HER2-expressing STING reporter cells to Anti-HER2/STG-982 ISAC.

$\sim 5 \times 10^5$ 293-Dual™ hSTING-R232-HER2 cells (**A**) or 293-Dual™ hSTING-R232-GFP control cells (**B**) were stimulated with increasing concentrations of Anti-HER2/STG-982 ISAC (DAR ~ 4), Anti- β Gal/STG-982 ISAC (DAR ~ 4), or STG-982 only. After overnight incubation, the STING response was determined using QUANTI-Blue™ Solution, a SEAP detection reagent. The optical density (OD) at 630 nm is shown as mean \pm SEM.

TECHNICAL SUPPORT

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