Validation data for J774-Dual™ cells

For research use only

Version # 18G11-JC

J774-Dual™ cells have been derived from the mouse J774.1 macrophage-like cell line by stable integration of two inducible reporter constructs. J774-Dual™ cells express an NF-κB-inducible secreted embryonic alkaline phosphatase (SEAP) reporter gene and an interferon regulatory factor (IRF)-inducible Lucia luciferase gene. Thus, J774-Dual™ cells allow to simultaneously study the NF-κB pathway, by assessing the activity of SEAP, and the IRF pathway, by monitoring the activity of Lucia luciferase.

NF-κB Response of J774-Dual cells to PRR ligands

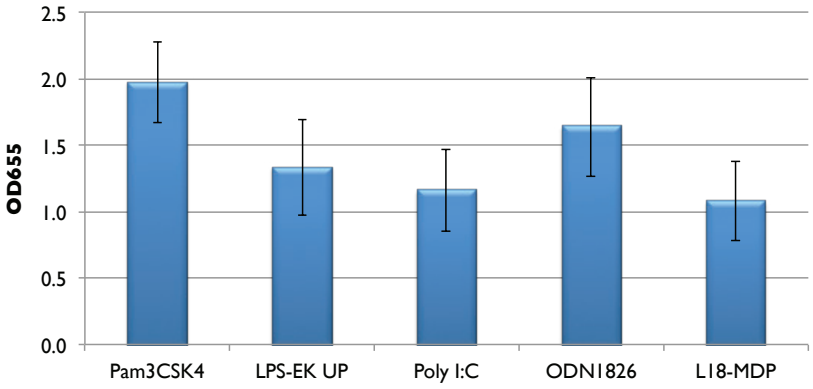

Figure 1: J774-Dual™ cells were stimulated with various PRR agonists known to activate the NF-κB pathway: Pam3CSK4 (TLR1/2 ligand, 1 µg/ml), ultrapure lipopolysaccharide from *Escherichia coli* K12 (LPS-EK UP, TLR4 ligand, 100 ng/ml), poly(I:C) (TLR3 ligand, 10 ng/ml), ODN1826 (TLR9 ligand, 10 µg/ml) and L18-MDP (NOD2 ligand, 10 µg/ml) NF-κB-induced SEAP activity was assessed using QUANTI-Blue™, a SEAP detection reagent, and by reading the optical density (OD) at 655 nm.

IRF Response of J774-Dual cells to various PRR ligands

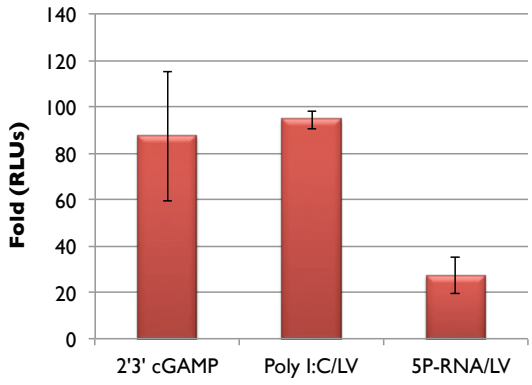

Figure 2: J774-Dual™ cells were stimulated with various PRR agonists known to activate the IRF pathway: 2'3'-cGAMP (STING ligand, 2 µg/ml), poly(I:C) complexed with the transfection reagent LyoVec™ (LV) (RIG-I/MDA-5 ligand, 30 ng/ml), and 5'ppp-dsRNA (5P-RNA) complexed with LyoVec™ (RIG-I ligand, 1 µg/ml). After 24h, IRF-induced Lucia luciferase activity was determined by measuring relative light units (RLUs) using the QUANTI-Luc™ assay and a luminometer.

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 Hong Kong : +852 3-622-34-80
E-mail: info@invivogen.com