### **Supplementary Materials file 2**

**Anti-idiotype palivizumab ELISA method**

The spectrophotometric ELISAs were recorded with a microplate reader (Spectramax M2, Molecular Devices, Sunnyvale, CA, USA) with three replicates of blanks, standards and samples. All ELISAs were performed according to the methods described by Bio-Rad with some modifications. Briefly, 100 μL per well of 1 μg/mL anti-palivizumab idiotype antibody HCA261 (Bio-Rad, Richmond, CA, USA) in 1x PBS was coated onto a clear flat-bottom Maxisorp 96-well plate (Nunc, Thermo Scientific, Waltham, MA, USA) and incubated overnight at 4°C. After incubation, the microtiter plate was washed three times with PBS with 0.05% Tween-20 (PBST) (Bio-Rad) and blocked for 1 h with 150 μL of PBST with 1% of bovine serum albumin (BSA) (BlockerTM BSA (10x) in PBS, Thermo Scientific) at room temperature (RT). After washing three times, standards and samples were added to the wells (100 μL) and incubated for 1 h at RT. Standards were prepared using palivizumab in serial dilutions (from 0–1,000 ng/mL) in PBST with 1% BSA (Thermo Scientific). Fluid samples were diluted 200x and 400x (data were averaged) with PBST supplemented with 1% of BSA, added in wells (100 μL) and incubated at RT for 1 h. After incubating and washing, 0.16 μg/mL horseradish peroxidase (HRP)-conjugated goat anti-human IgG (Bio-Rad) was added to wells (100 μL) and incubated at RT for 1 h. After the plates were washed three times with PBST, 100 μL of the substrate 3,3’,5,5’-tetramethylbenzidine (1x, Invitrogen, San Diego, CA, USA) was added to the wells and incubated for 5 min at RT followed by addition of 50 μL of 2N sulfuric acid to stop the color reaction. Optical density was measured at 450 nm.