Reagent Preparation Sheet.

Working dilution of MAB212p in coating buffer for coating ELISA plates at a concentration of 2 ug/mL

Date prepared:

By:

I. **Hazard Assessment**

To protect yourself from any possible hazards associated with this task wear eye protection. You should also wear latex, nitrile, or vinyl gloves and a lab coat with long sleeves. To protect your legs and feet wear closed shoes and long trowsers. Do not wear sandles, shorts or a short skirt. Wash your hands before eating and when leaving the laboratory. You should review the MSDS for any chemical used in this procedure. In case of a spill with a toxic chemical remove all contaminated clothing and wash affected areas with copious quantities of water. Check location of the nearest safety shower. Eyes should be washed copiously for 15 minutes.

II. **Reagent**
MAB212p dilution in coating buffer for SeM ELISA

III. **Purpose of reagent**
Serves as the capture antibody MAB212p for SeM ELISA. This antibody serves as the coating agent on the ELISA plate to concentrate target SeM and Sem containing streptococci.

IV. **Reconstituted vial and storage**
5 Vials (1 mL) received at 1.4mg/mL. Aliquotted into 50 ul aliquots and frozen at -20 C.

V. **To prepare a working dilution**

Number of moles in 10 mL @ 2 ug/mL = Number of moles in x mL @ 1.4 mg/ml (added to 10 mL buffer)
10 mL X 2 ug/mL = x mL X 1.4 mg/mL
10 mL X 2 ug/mL = x mL X 1400 ug/mL
x mL = (10 mL X 2 ug/mL)/ 1400ug/mL *solve for x*
x ul = 1000 *(10 mL X 2 ug/mL)/1400ug/mL *give volume in uL*
x ul = (10 mL X 2 ug/mL)/1.4 mg/mL *1000's cancel out*
x = 10*2/1.4 yields volume (in uL) of MAB212p @ 1.4 mg/mL to add to 10 mL to make a 2 ug/mL solution in uL

The R code to generate table below

> y=c(1.2,1.3,1.4,1.5) *# a variety of concentrations, including the 1.4 mg/mL used in the example*
> x=10*2/y; x *#prints volumes (uL) to add of each concentration*

[1] 16.66667 15.38462 14.28571 13.33333

Original concentration MAB212p	**1.2 mg/mL**	**1.3 mg/mL**	**1.4 mg/mL**	**1.5 mg/mL**
Volume MAB212p to use	16 ul	15 ul	14 uL	13 ul
Volume of coating buffer (0.15M PBS, pH 7.6)	10 mL	10 mL	10 mL	10 mL
Check which volume used	____	____	____	____

VI. **Comments**