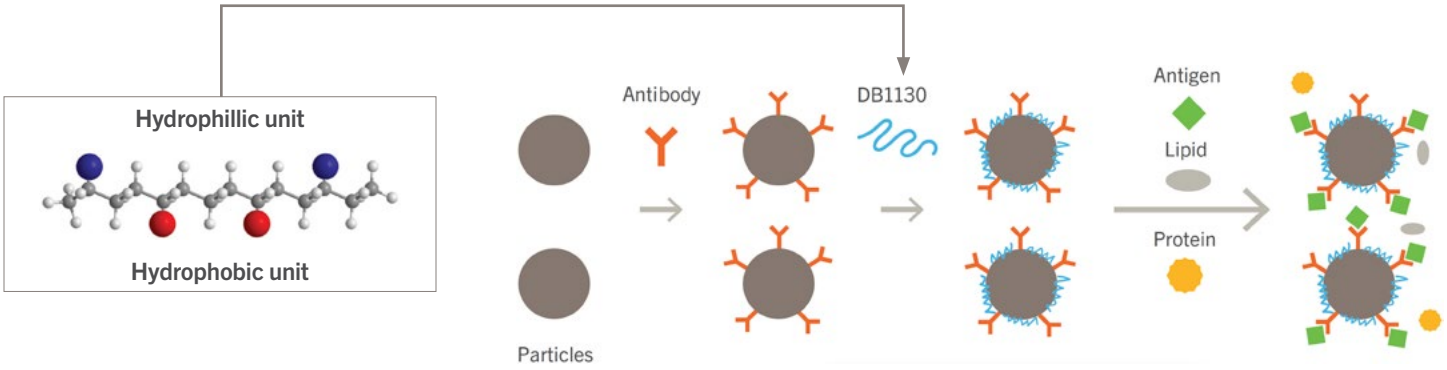
FULLY SYNTHETIC BSA ALTERNATIVE

Blockmaster™ DB1130 is a fully synthetic, water soluble polymer blocking reagent consisting of both hydrophilic and hydrophobic units. The optimized combination of hydrophilic and hydrophobic units strongly reduces the non-specific binding and greatly enhances colloidal stability of latex and magnetic beads.

Key Properties

- Can be used as a substitute blocking agent for BSA
- Simple coating process based on physical adsorption
- Excellent blocking properties on both latex and magnetic beads
- Improves colloidal stability of both latex and magnetic beads



Protocol

Blocking of Antibody Conjugated Latex Beads

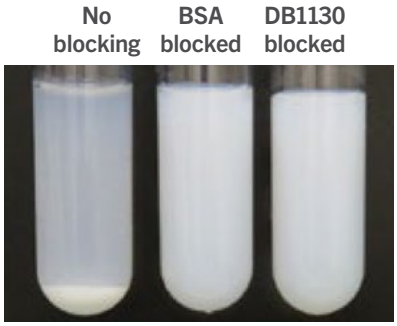
1. Mix Latex beads 25 mg (5%, 500 µL or 10% 250 µL) and Reaction Buffer* (ca. 4.2 mL) at 25-37˚C
2. Add antibody 10 mg/mL 250 µL, mixing at 25-37˚C for 30-60 min
3. Add 1% EDC 125 µL, mixing at 25-37˚C for 30-60 min
4. Centrifugation or tangential flow filtration
5. Add Blocking solution (0.5 wt% Blockmaster DB1130) mixing at 25-37˚C for 30-60 min
6. Centrifugation or tangential flow filtration
7. Add Storage Buffer, mixing at 25-37˚C for 30-60 min
8. Redisperse by ultrasonication
9. Store at 2–8˚C

** HEPES buffer (pH 6.0-7.5) is often chosen, other choices are MES buffer (pH 5.0-6.5) and borate buffer (pH 7.5-10.0).*

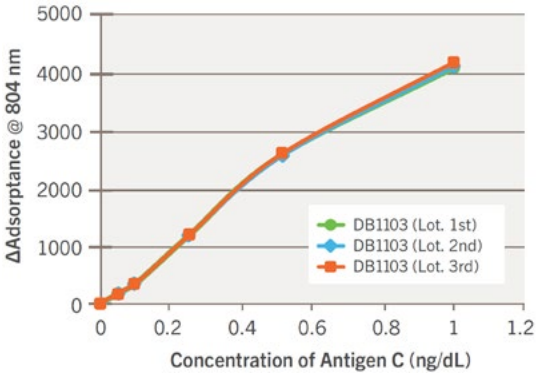
Note: Experimental optimization of process parameters, such as the concentration and reaction time, may be necessary.

Performance

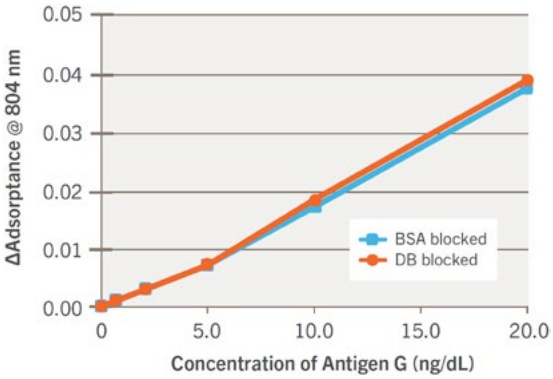
Colloidal Stability

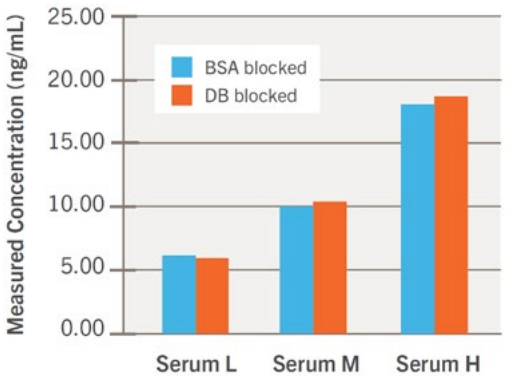


Dose-Response Curves and Lot-to-Lot Reproducibility

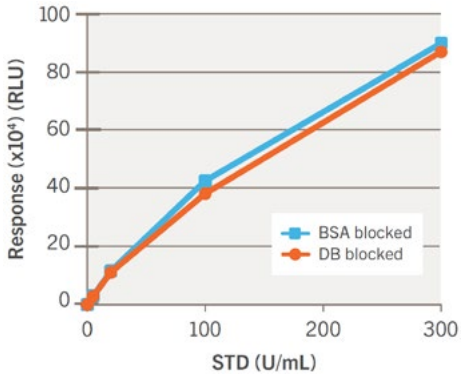


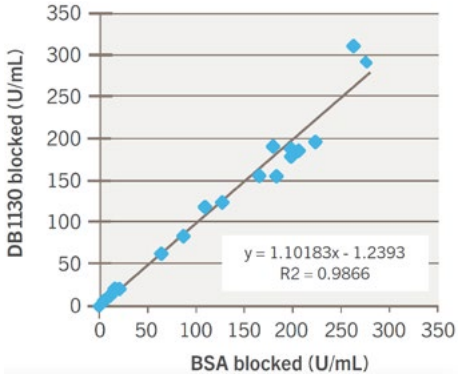
Dose-Response Curves and Response in Different Serums





Application in CLEIA; Dose-Response Curves and Correlation Test of 31 Specimens





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