

Product Description

Casein Buffer 20X-4X Concentrate #CBC1, biotin free

CBC1 is a concentrated stable liquid filterable formulation of universal biotin free and IgG free Casein Colloid Buffer made in proprietary manufacturing process.

Recommended use includes

(i) Blocking of the solid phase (immunoplates, blotting membranes, other porous and non-porous materials) made as separate blocking procedure after coating with capture reagent (e.g. binding antibody or antigen), in sense of blocking free vacant sites onto immunosorbent surface. This will also improve long-term stability of immobilized capture reagent, especially after drying.

(ii) Application of **CBC1** as constituent part of diverse Diluent formulations with both specimen/calibrator and detecting reagents/conjugates. In this case casein will eliminate adverse matrix effects with different complex specimens and block non-specific binding (NSB) of detecting conjugates to immunosorbent in the absence of analyte.

1 volume of **CBC1** mixed with 3-to-19 volumes of your own diluent or simple PBS will yield 4-to-20 volumes of Casein Diluent/Blocker depending on desired working strength. **CBC1** is basically not compatible with diluents containing > 1mM Ca⁺⁺ and other di-/multi-valent cations.

CBC1 will effectively eliminate NSB/backgrounds in ELISA, blotting, ICT and IHC applications. Please note, that casein will block protein-to-protein binding of **truly non-specific** origin. **CBC1** will not prevent essentially **specific** interactions (e.g. through HAMA or like interfering substances) that may also cause false positive (sandwich assays) or false negative (competitive assays) reactions. For neutralizing HAMA add CBC based diluent with proven HAMA Blocker, e.g. our product #HAMAB.

CBC1 is biotin-free and therefore is ideally compatible with enhanced biotin-streptavidin detection systems giving no drop in detecting activity with streptavidin conjugate. On the contrary, diluents made of CBC may boost positive signals with Streptavidin-PolyHRP conjugates which, along with lowering backgrounds, gives complementary effect significantly improving overall signal-to-noise ratios.

CBC1 used as a component of liquid ready-to-use formulations features stabilizing effect with detecting streptavidin & antibody/antigen conjugates and controls. **CBC1** is especially useful for stabilizing larger PolyHRP conjugates.

CBC1 is stable at +4°C during at least 2 years from the date of manufacture.

CBC1 is essentially 5,5% (w/v) 0,2/0,45µm-filterable colloidal solution of biotin-free and IgG free casein in 0,15M salt buffer base pH 7,3. This formulation contains non-mercury safe wide-spectrum anti-microbial preservative/biocide (5-Bromo-5-Nitro-1,3-dioxane) at 0,12%.

CBC1 is filtered through 0,45 µm at the end of the manufacture process.