



## Product Description

### Casein Buffer 20X-4X Concentrate #CBC2, biotin free

**CBC2** is a concentrated stable liquid filterable formulation of universal 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 an antibody or an 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 (ideally consider dedicated **DBS-C**).
- (ii) Application of **CBC2** 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 **CBC2** 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. **CBC2** is basically not compatible with diluents containing > 1 mM Ca<sup>++</sup> and other di-/multi-valent cations.

**CBC2** 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. **CBC2** will not prevent essentially **specific** interactions (e.g. through HAMA and heterophilic antibodies) 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 **#HAMAB**.

**CBC2** is not biotin-free and therefore is not compatible with enhanced biotin-streptavidin detection systems as it will inhibit detecting activity of streptavidin conjugate.

**CBC2** used as a component of liquid ready-to-use formulations features stabilizing effect with detecting antibody/antigen conjugates and controls. **CBC2** is especially useful for stabilizing larger PolyHRP conjugates.

**CBC2** is stable at +4°C during at least 3 years from the date of manufacture.

**CBC2** is essentially 5,5% (w/v) 0,45µm-filterable colloidal solution of IgG free casein balanced in a neutral salt buffer. This formulation contains non-mercury safe wide-spectrum anti-microbial microbicide (5-Bromo-5-nitro-1,3-dioxane) as approved IVD preservative at 0,12%.

**CBC2** is filtered through 0,45 µm at the end of the manufacture process.