



## cDenHyb™ Solutions (for Cell FISH --- interphase and metaphase FISH)

cDenHyb™ solutions are highly effective hybridization solutions for FISH on interphase, metaphase, and cultured cells. cDenHyb™ solutions are compatible with a wide range of home-brewed or commercially available directly- and indirectly labeled DNA probes: repeat sequence, paint, and unique sequence probes.

- cDenHyb-1 is optimized for cell FISH when repeat sequence or paint probes (*e.g.*, Vysis CEP or WCP probes) were used. But cDenHyb-1 is slightly weak for unique sequence probes.
- cDenHyb-2 is optimized for cell FISH when unique sequence probes (*e.g.*, Vysis LSI probes) were used. But cDenHyb-2 is less effective for repeat sequence or paint probes.

Dilute or suspend labeled DNA probes in an appropriate cDenHyb™. Then, perform your in-house cell FISH procedure with the DNA probes (in cDenHyb™). More effective and convenient FISH can be achieved by using Insitus MetalTray FISH protocols\* which are based on the use of [Metal Slide Tray](#) and [HybBox™](#) in conjunction with the use of cDenHyb.

If you perform FISH with Insitus cDenHyb™ solutions using your in-house FISH protocol or protocol provided by vendors that sell DNA probes, a slight adjustment of your denaturation condition close to the Insitus Manual Cell FISH protocols would maximize hybridization signals.

If you are doing FISH with your home-brewed DNA probes, simply dilute or suspend your probes in cDenHyb solution. Add blocking DNA if necessary. The optimal concentration of the home-brew probe must be determined empirically.

If you are using commercial repeat sequence probes (*e.g.*, Vysis), you may dilute these probes by **100- to 500-fold**, depending on probes, with cDenHyb-1 solution. Hybridization in HybBox or other system for 30 min is sufficient to view good signals.

If you are using commercial unique sequence probes (*e.g.*, Vysis), you may dilute these probes by **50- to 100-fold**, depending on probes, with cDenHyb-2 solution. For ready-to-use **Vysis UroVysion Kit**, the premixed UroVysion probes can be diluted at 1:5 or 1:10 with cDenHyb-2. Overnight hybridization in HybBox at ambient temperature or humid box at 37°C is recommended to increase signal intensity. For mixed probes containing unique sequence and repeat sequence probes, dilute both types of probes in cDenHyb-2.

\***Application of DenHyb to CGH (Comparative Genomic Hybridization):** cDenHyb-2 is also used to enhance signals for [CGH](#)

---

Available cDenHyb are:

- Catalog # INS-D001; cDenHyb-1, 1 ml
- Catalog # INS-D002; cDenHyb-2, 1 ml