Collagel Hydrogel (ACGH-002)

Precautions and Disclaimer

The handling of any organism-derived products has potential to be biologically hazardous. Proper precautions must be taken to avoid exposure. Always wear proper protective equipment (Gloves, safety glasses, etc.) when handling these materials. We recommend following the universal procedures for handling products of any organism's origin as the minimum precaution against contamination. All product offered by Alphabioregen are for laboratory research purposes only. Any other use and results of that use are the sole responsibility of the user and are not in any way the responsibility of Alphabioregen.

Product Data and Description : Collagel Hydrogel (ACGH-002) is a biocompatible complex of type I collagen fibers that will help accelerate the pace of your biomedical and cell/3D tissue engineering applications. Collagel Hydrogel (ACGH-002) contains our high quality, sterile type I tendon collagen which has been specially formulated for ease of gel formation. Once in a 3D tissue model, the Collagel Hydrogel (ACGH-002) will not break or tear apart easily when stretched. Collagel Hydrogel (ACGH-002) can also be flowable, allowing it to be readily used as an injectable, biocompatible drug delivery matrix on animal models. To control release of your drug it is necessary to bind your active agent to Collagel Hydrogel (ACGH-002) by covalent or non-covalent bonds, or by sequestering in a secondary matrix. Other potential applications of our Collagel Hydrogel (ACGH-002) are as orthopedic adhesives via their swelling ability, as scaffolds for bone infiltration and formation through their mesh structure, as isolators to retain cells, or as gene delivery complexes. The high quality and convenience of our Collagel Hydrogel (ACGH-002) products will improve the performance of your biomedical and cell/3D tissue culture applications. Collagel Hydrogel (ACGH-002) is an ideal matrix for growing fibroblasts, primary hepatocyte culture and for growing smooth muscle cells. You will be able to get adipogenesis with MSCs using our Collagel Hydrogel (ACGH-002). For cells/tissue applications that require a less rigid or a more porous matrix, try our other Collagel Hydrogel (ACGH-002) Produtcs.

Catalog Number	ACGH-002
Cell Culture Testing	Pass
Source	Rat Tendon
Shelf Life	≥ 12 months
Storage	-20°C
Purity	>95% SDS Page
pH	7.0
Conductivity	0.8 mS/cm
Sterility	Pass
Endotoxin Level	≤ 1EU/ ml

Cell Line

LNCaP in a 3D culture using our Collagel Hydrogel (ACGH-002)

Precautions:

Everything should be kept cold to avoid the Collagel Hydrogel (ACGH-002) from solidifying. Avoid air bubbles. This protocol is based on 6-well plate usage.

Recommended	3×10^6 cells or a fully confluent T75 20 ml Collagel Hydrogel (ACGH-002) DMEM

Methods: Thaw your Collagel Hydrogel (ACGH-002) sample bottle at room temperature or in a 37°C water bath, invert product while thawing. When you see a small amount of ice in your sample, transfer the bottle into an ice bath. It is important to keep Collagel Hydrogel (ACGH-002) on ice since it will solidify at temperature above 8°C.

1) Place a sterile magnetic stir bar in a sterile beaker
2) Place plate containing ice on a stir plate
3) Place the sterile beaker containing the stir bar on the ice bath
4) Pour the Collagel Hydrogel (ACGH-002) into the beaker carefully, try to avoid air bubbles
5) Slowly start stirring collagel Hydrogel (ACGH-002)
6) Add your wanted media to the Collagel Hydrogel (ACGH-002). Judge the pH visually by the phenol red in the media then add your cell suspension.
7) Pipette your wanted volume of the mixture into each well.
8) Let 6-well plate sit at room temperature for 10-15minutes before placing in the incubator
9) 1 hour later add your wanted volume of media on top of each Collagel Hydrogel (ACGH-002) (2-2.5 ml)
10) Use within 1 week, change media every 2 days or as needed.