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Product Information

COLLAGEN, TYPE IV from Engelbreth Holm Swarm Sarcoma

Product No. C0543
Store at -20 °C

Product Description

Collagen, Type IV (C-0543) is extracted from Engelbreth Holm Swarm transplantable mouse tumor in the presence of reducing agent. When reduced with β -Mercaptoethanol and run on SDS-5% PAGE and stained, two bands are visualized with an apparent MW of 170,000 and 185,000 daltons. Faint doublets of twice the MW also separate. Upon standing in dilute acetic acid two smaller bands of apparent MW 140,000 and 160,000 appear.

Product Use

Collagen Type IV mediates attachment of epithelial, endothelial, myoblasts and nerve cells in vivo and in vitro. Optimal conditions for attachment must be determined for each cell line.

Collagen Type IV can be reconstituted to a concentration of 0.5-2.0 mg/ml in 0.25% acetic acid. Dissolve for several hours at 4 °C, swirling occasionally. Solution may appear hazy, with some undissolved material. This is a natural occurrence and does not adversely affect biological performance.

Coating of tissue culture plastic dishes may be performed by air drying the above protein solution, or by preincubating the same solution overnight at 4 °C (or several hours at 37 °C) without air drying.

Dried coated dishes can be sterilized by overnight exposure to UV light in a sterile hood or by rinsing with 70% ethanol. Alternatively the collagen solution may

be sterilized by dialysis in a 0.25% acetic acid and 0.5% chloroform solution.²

This product has been shown to support attachment and growth of cells requiring Collagen Type IV.

Reagent

For laboratory use only.
Not for drug, household or other uses

Storage/Stability

Collagen is stable for 2 years when stored desiccated at -20 °C. Solutions prepared in acetic acid are stable for at least 6 months¹ when stored at 2-8 °C. Collagen coated plasticware can be stored for several months at room temperature before using.

References

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6. Timpl, R. et al, Eur J Biochem., 84, 43-52 (1978).
7. Tryggvason, K. et al, Biochemistry, 19, 1284-1289 (1980).

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