

CellPlayer™ Angiogenesis CryoKit EGF/Suramin Supplement Kit

Essen BioScience Catalog Number: 4439

Presentation and Storage

The CellPlayer Angiogenesis CryoKit EGF/Suramin Supplement Kit is composed of two vials; 1) EGF (100 μ L) is supplied at a concentration of 2 μ g/mL in PBS containing 0.1% BSA, and 2) suramin (200 μ L) is provided at a concentration of 2mM in growth media. This kit is shipped on dry ice and, if stored at -20 °C, is stable until expiration date indicated on the respective vials. When stored at 4 °C the shelf life is 2 weeks from date of thaw.

Background and Intended Use

The CellPlayer Angiogenesis CryoKit EGF/Suramin Supplement Kit contains EGF and suramin, which are known to have opposite effects on angiogenesis. Suramin, among other activities, is a known inhibitor of angiogenesis that is believed to occur by blocking growth factor binding to its cognate receptor. EGF, signaling through EGFR, is thought to stimulate VEGF expression, which has been shown to promote angiogenesis.

Biological Activity

The Suramin and EGF preparations included in the EGF/Suramin Supplement Kit have been validated for use with both the CellPlayer Angiogenesis *LiveKit* and *CryoKit* and effects have been shown to be concentration dependent.

Recommended Use

EGF

We recommend that EGF be used at a final concentration of 1ng/mL (1:2000 dilution of stock), diluted in assay medium, and added directly to the cells in culture. The amount of EGF supplied is sufficient to feed the entire plate for six feedings. To make up sufficient reagent at the working concentration for an entire plate, add 9 μ L to 18mL assay media (14.4mL media required to feed the entire plate at 0.15mL/well).

Suramin

We recommend that suramin be used at a final concentration of 100 μ M (1:20 dilution of stock), diluted in assay medium **containing 1ng/mL EGF**, and added directly to the cells in culture. Due to the low endogenous tube formation in basal media alone, to observe Suramin-mediated inhibition of angiogenesis it must be added in the presence of growth factor. The amount of suramin supplied is sufficient to feed **four wells** at 100 μ M for six feedings. To make up sufficient reagent at the working concentration for four wells, add 32.5 μ L to 0.65mL growth media + EGF.

For the full effects to be observed, the reagents should be added with every change of media throughout the course of the assay. We recommend adding 0.15mL/well at the working concentration.



**MSDS Information****EGF**

MSDS information can be found at:

http://essenbioscience.com/documents/Esсен_CellPlayer_Angiogenesis_Human_EGF_MSDS.pdf

Suramin

MSDS information can be found at:

http://essenbioscience.com/documents/Esсен_CellPlayer_Angiogenesis_Suramin_MSDS.pdf

For additional information including a simplified description of the protocol and an extensive application note, please visit our webpage at <http://essenbioscience.com/productsAppAngiogenesis.html>

For a detailed protocol including use of the CellPlayer™ Angiogenesis CryoKit and LiveKit, as well as additional information, please contact Essen BioScience at: sales@essenbio.com

For research use only. Not for therapeutic or diagnostic use.

