Resource Summary Report

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IUSM Angiogenesis Endothelial and Pro-Angiogenic Cell Core

RRID:SCR_011001
Type: Tool

Proper Citation

IUSM Angiogenesis Endothelial and Pro-Angiogenic Cell Core (RRID:SCR_011001)

Resource Information

URL: http://www.scienceexchange.com/facilities/angiogenesis-endothelial-and-pro-angiogenic-cell-core-aepcc-iu

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Description: The Angiogenesis, Endothelial & Pro-Angiogenic Cell Core (AEPCC) is a state-of-the-art facility that has been established through the Indiana University Melvin and Bren Simon Cancer Center, a National Cancer Institute-designated cancer center, to conduct validated and highly reproducible in vitro and in vivo angiogenesis, endothelial, hematopoietic and multi-parametric flow cytometry assays and their role in normal and patient-related hematologic and cardiovascular disorders. In addition to possessing the in vitro and in vivo assays that define the endothelial progenitor outgrowth cells that possess in vivo vessel forming ability, the AEPCC recently stringently defined a population of pro-angiogenic and anti-angiogenic circulating hematopoietic stem and progenitor cells (CHSPCs) that has been shown to regulate angiogenesis. Discovery of these novel CHSPC subsets demonstrates the uniqueness and strength of the approach by the AEPCC that requires both phenotypic and functional data to validate specific circulating cells that participate in new blood vessel formation. The specific assays offered by the AEPCC function as quantitative analytical tools, potential biomarkers of several hematopoietic diseases, and as experimental platforms for understanding the basic mechanisms of angiogenesis and the interplay between the endothelial and hematopoietic systems. For example, not only are CHSPCs critical for normal and abnormal angiogenesis, but we and others have reported that certain endothelial cells are critical for CHSPC expansion ex vivo and that endothelial cells promote CHSPC engraftment post-ablation. The AEPCC serves to directly perform all of the assays required to analyze research samples, and as a consultation, education, and new assay development site for scientists within and outside the

IU School of Medicine and Indiana University. Furthermore, the AEPCC is one of only five nationally recognized Core Centers of Excellence in Molecular Hematology by the National Institutes of Health and is a certified core of the Indiana Clinical and Translational Sciences Institute (CTSI).

Abbreviations: IUSM AEPCC

Synonyms: Indiana University School of Medicine Angiogenesis Endothelial and Pro-Angiogenic Cell Core, Indiana University School of Medicine Angiogenesis Endothelial and Pro-Angiogenic Cell Core (AEPCC), IUSM Angiogenesis Endothelial and Pro-Angiogenic Cell Core (AEPCC)

Resource Type: core facility, service resource, access service resource

Funding:

Resource Name: IUSM Angiogenesis Endothelial and Pro-Angiogenic Cell Core

Resource ID: SCR_011001

Alternate IDs: SciEx_9273

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Record Last Update: 20250525T032733+0000

Ratings and Alerts

No rating or validation information has been found for IUSM Angiogenesis Endothelial and Pro-Angiogenic Cell Core.

No alerts have been found for IUSM Angiogenesis Endothelial and Pro-Angiogenic Cell Core.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We have not found any literature mentions for this resource.