

Molecular Biology Lab.

Logo



RESEARCHER

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Department

Biotechnology, chemistry and pharmacy

LAB

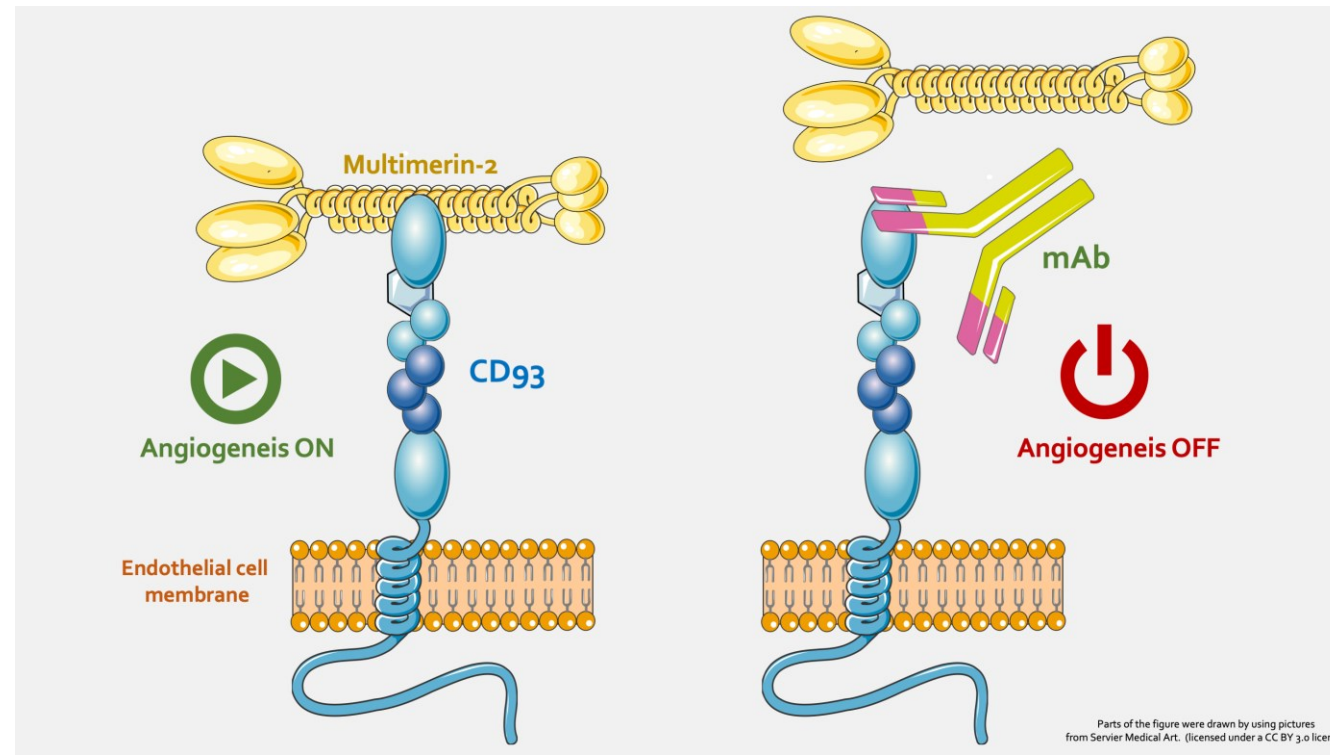
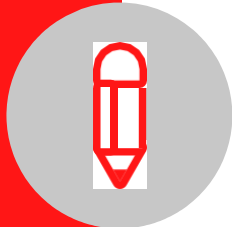
Molecular Biology

Research activity



The research group is concerned with the study of the molecular mechanisms of angiogenesis (in neovascular retinopathies and tumors) and tumor development. Within the group there is also an active line of translational research aimed at the development of bioactive molecules with anti-angiogenesis and anti-tumor functions. The research includes the use of transgenic and knockout animal models, cultures of primary endothelial cells, cultures of tumor cell lines, expression and purification of recombinant proteins expressed in eukaryotic cells and bacteria. The analyzes include in vitro, in vivo and ex vivo functional testing of cell proliferation, migration, gene expression analysis and tumor development..

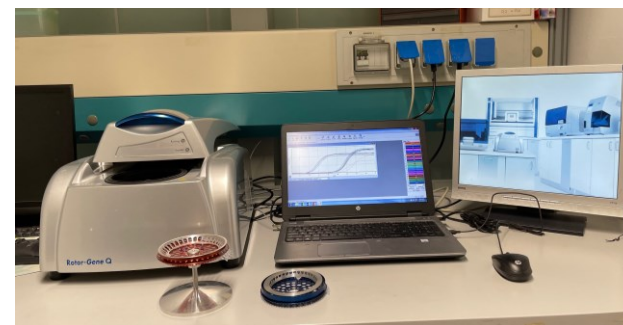
Images



One of the main lines of research is the investigation of the CD93 membrane receptor and the inhibition of its function for therapeutic purposes.



Rooms for cell cultures.

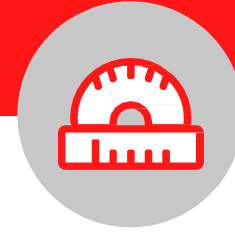


Platform for gene expression analysis.



Platform for the purification of recombinant proteins..

Technologies and services



The laboratory has large and well-equipped rooms for cell cultures, a platform for analyzing gene expression and a platform for purifying recombinant proteins.

The services that can be offered to companies concern the design, cloning and expression of recombinant proteins in bacteria or eukaryotic cell systems and the subsequent purification and functional analysis with in vivo, ex vivo and in vitro assays.

Applications and collaborations



The laboratory is about to start a collaboration with the company PlasmaLife (Siena) to produce and purify a recombinant protein from a pathogenic horse bacterium. The protein will be used to develop an enzymatic solid phase test to detect the presence of antibodies in the plasma of infected animals.

For more information



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