Onkofetale Marker im hepatozellulären Karzinom

We are investigating the expression profile of Nope in the liver. This protein is localized in the plasma membrane of early hepatocytes and was initially identified in a microarray analysis where it showed a significantly higher expression level in purified hepatoblasts than in adult liver.

Priv.-Doz. Dr. Dirk Nierhoff
Leiter der AG

LFI-Gebäude, 5. Etage

Telefon +49 221 478-7280
E-Mail dirk.nierhoff@uk-koeln.de

Projects actively being pursued

Neighbor of Punc E11 (Nope)

Expression profile in the liver

We were able to characterize Nope as an oncofetal surface marker in the liver. Currently, we are mainly focussed on its expression pattern in liver injury and liver regeneration in different mouse models.

Function

Nope is a protein thought to be essential for axon guidance by similarity with its family members neogenin and deleted in colorectal cancer (Dcc). Neogenin is thought to act in netrin receptor-adhesive clustering and it may be involved in maintenance of multipotent progenitor cells since it is expressed during transition of undifferentiated into differentiated cell types. To find out more about the function of Nope, we are currently trying to establish a conditional Nope-/- mouse.
Human cancer tissue

We were able to establish Nope as a tumor marker for hepatocellular cancer in the mouse and more recently, we were able to identify Nope also in human hepatocellular cancer. Currently, we are working to identify Nope in various epithelial human cancer samples.

References

Major Research Articles

1) Bowe A, Zweerink S, Mück V, Kondylis V, Schulte S, Goeser T, **Nierhoff D**.


**Team**

Dr. Susanne Zweerinck, Postdoktorandin  
Dr. Vera Mück, MD  
Elisabeth Konze, Technician  
Gudrun Suckau, Technician  
Gitta Jakob, Technician  
Gisela Holz, Technician