

Meeting abstract

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## The hCMV chemokine receptor US28 prevents melanoma growth

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The human cytomegalovirus (hCMV) encodes the G protein-coupled receptor (vGPCR) US28. This receptor signals constitutively and interacts with a broad range of chemokines, which are crucial to the pathophysiological significance and immunoregulatory aspects of this receptor. Chemokines and their receptors have been shown to be key determinants of tumor growth and formation of metastases. US28 (and mutants thereof, i.e. US28R129A and US28Δ317) exert anti-tumorigenic effects in various melanoma cell lines by scavenging chemokines from the tumor environment. Here we show that in contrast to all other previously studied cell lines, US28 is expressed on the cell surface in the melanoma cell lines Sbcl2 and 451Lu. We suggest that GASP – the G protein-coupled receptor-associated sorting protein – which sorts US28 and many other GPCRs to the lysosomes is absent in melanoma cells. The absence of GASP might effect the tumor suppressing properties of US28.