

Publication**Aminopeptidase N is directly sorted to the apical domain in MDCK cells****JournalArticle (Originalarbeit in einer wissenschaftlichen Zeitschrift)****ID** 153695**Author(s)** Wessels, H. P.; Hansen, G. H.; Fuhrer, C.; Look, A. T.; Sjoström, H.; Noren, O.; Spiess, Martin**Author(s) at UniBasel** [Spiess, Martin](#) ;**Year** 1990**Title** Aminopeptidase N is directly sorted to the apical domain in MDCK cells**Journal** Journal of Cell Biology**Volume** 111**Number** 6 Pt 2**Pages / Article-Number** 2923-30

In different epithelial cell types, integral membrane proteins appear to follow different sorting pathways to the apical surface. In hepatocytes, several apical proteins were shown to be transported there indirectly via the basolateral membrane, whereas in MDCK cells a direct sorting pathway from the trans-Golgi-network to the apical membrane has been demonstrated. However, different proteins had been studied in these cells. To compare the sorting of a single protein in both systems, we have expressed aminopeptidase N, which already had been shown to be sorted indirectly in hepatocytes, in transfected MDCK cells. As expected, it was predominantly localized to the apical domain of the plasma membrane. By monitoring the appearance of newly synthesized aminopeptidase N at the apical and basolateral surface, it was found to be directly sorted to the apical domain in MDCK cells, indicating that the sorting pathways are indeed cell type-specific.

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