# Identification of Novel E-Selectin Ligands Expressed on Human and Bovine Lymphocytes [MAS]

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Here, we describe novel E-selectin ligands expressed on human and bovine lymphocytes. Leukocyte extravasation into the underlying tissue involves a multi-step process requiring many molecular interactions. E-selectin, a member of the selectin family, is up-regulated and expressed on activated endothelial cells and mediates leukocyte rolling on the activated endothelium via E-selectin ligands expressed on the circulating leukocyte. In this report, we used an E-selectin/Fc chimera to analyze bovine γδ T cell and human lymphocyte E-selectin ligands.

E-selectin chimera specifically stained bovine and human leukocytes by FACS analysis. Immunoprecipitation of biotinylated γδ T cell lysates with chimera resulted in two ligands of 200kD and 250kD. Additionally, chimera immunoprecipitation of biotinylated human lymphocyte lysates resulted in three potential ligands of 120kD, ~220kD, and 260kD. E-selectin ligand immunoprecipitation was specifically inhibited by blocking the chimera with function blocking monoclonal antibody. Lymphocyte E-selectin ligands have proven to be difficult to define in the past, therefore, we have provided preliminary information regarding lymphocyte E-selectin ligand expression.